NTHLY LABOR REVIEW

TED STATES DEPARTMENT OF LABOR • BUREAU OF LABOR STATISTICS

Inspection of Camshafts for Airplane Motors

Photo by courtesy of Farm Security Administr

In this issue . . . Hours and Efficiency in British Industry • Inter state Migration of Workers • Union-Manage ment Cooperation • Federal Personnel by Type of Work

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HUGH S. HANNA, EDITOR

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CONTENTS

Special articles: Page

Hours and efficiency in British industry 1337
Interstate migration of workers 1347
Union-management cooperation 1351
Federal personnel by types of work performed 1360

Defense activities and conditions:

Labor requirements for shipbuilding under defense program 1375
Shift operations in the machine-tool industry, March 1941 1380
Maximum age for civil-service positions under national defense 1385
Paper-industry policies on military absences 1386
Negro participation in defense work 1388

Foreign wartime policies:

Extension of coverage of Canadian Industrial Disputes Act 1391
Application of wartime wage policy by Canadian conciliation boards 1391
British National Service Act of 1941 1393

Industrial relations:

Finnish Government declaration on industrial relations and wages 1395

Employment and labor conditions:

Employability of persons on relief in Marion County, Indiana 1397
Fees of private employment agencies in California, 1940 1401
Immigration to Canada, 1940 1404

Youth in industry:

Eight years of CCC operations, 1933 to 1941 1405

Social security:

Voluntary disability insurance in the United States 1414
Placement work of public employment services, March 1941 1419
Unemployment-compensation operations, March 1941 1424
Sickness-insurance system for longshoremen in Brazil, 1940 1428
Determination of need for British unemployment assistance 1431

Vacations with pay:

Paid vacations in the Dominican Republic, 1941 1434

Cooperation:

Farmers' cooperative purchasing in the United States, 1913 to 1939–40 1436
Cooperatives in Newfoundland 1438

Education and training:

NYA aid to Negroes, 1935–40 1442
A southern experiment in Negro education 1445

Labor laws and court decisions:
Court decisions of interest to labor: Page
Discrimination in hiring union members banned 1448
Determination of bargaining unit by Labor Board upheld 1449
Picketing by labor unions 1450
Fee-fixing provisions of Nebraska employment-agency law upheld 1451
Arizona law prohibiting discharge because of union membership held unconstitutional 1452
Labor organizer awarded workmen's compensation 1452
Prison labor:
Work of Federal Prison Industries Corporation, 1940 1454
Cost and standards of living:
Changes in cost of living, March 15 to April 15, 1941 1456
Expenditures of British agricultural workers, 1937–38 1458
Industrial disputes:
Recent strikes 1462
Strikes in February 1941 1462
Activities of National Mediation Board in May 1941 1477
Activities of the United States Conciliation Service, April 1941 1478
Strike-control legislation in Mexico, 1941 1480
Labor turn-over:
Labor turn-over in manufacturing, March 1941 1482
Minimum wages and maximum hours:
Wage order for portable lamp and shade industry 1487
Wage order for straw-hat, coconut, and vegetable-packing industries in Puerto Rico 1487
Establishment of minimum scale for knit-goods industry in Cuba, 1941 1488
Wages and hours of labor:
Earnings in the manufacture of rubber products, May 1940 1490
Earnings in the seamless-hosiery industry under 32.5-cent minimum wage 1514
Earnings and hours in processed-waste industry, 1940 1536
Hourly earnings in jute-bagging industry, 1940 1543
Salaries of school employees, 1940–41 1544
Canada—Annual earnings on steam railways, 1939 1547
Colombia—Agricultural wages, March 1940 1547
Trend of employment and pay rolls:
Summary of reports for April 1941 1550
Detailed reports for industrial and business employment, March 1941 1556
Building operations:
Review of building construction in 1940 1573
Summary of building construction in principal cities, April 1941 1584
Retail prices:
Food prices in April 1941 1589
Coal prices in March 1941 1595
Wholesale prices:
Wholesale prices in April 1941 1598
Labor conditions in Latin America 1428, 1434, 1480, 1488, 1547
Recent publications of labor interest 1604

Page
1448
1449
1450
1451
1452
1452
1454
1456
1458
1462
1462
1477
1478
1480
1482
1487
1487
1488
1490
1514
1536
1543
1544
1547
1547
1550
1556
1573
1584
1589
1595
1598
1547
1604

MONTHLY LABOR REVIEW

FOR JUNE 1941

HOURS AND EFFICIENCY IN BRITISH INDUSTRY

By MAX D. KOSSORIS, *Bureau of Labor Statistics*

Summary

UNDER the impetus of production for defense it has been necessary in the United States to increase drastically the capacity for the production of war materials. Expansions of plant capacity have been made. Concurrently it has been necessary to train or retrain large numbers of workers for skilled and semiskilled occupations. Since both production facilities and trained manpower are limited, it has been necessary in an increasing number of defense industries to work considerable overtime.

Overtime work in this country at present presents two separate problems—the rate of pay for overtime work and the extent of overtime itself. The Fair Labor Standards Act and the Public Contracts Act impose no limit on the number of hours that can be worked per week. Both of them do require the payment of a penalty overtime rate of time and one-half for hours worked in excess of 40 per week. Under these conditions the question arises as to what effect the lengthening of the workweek has on the physical volume of production, as well as upon the health of the workers. Many wage earners at the present time are working on a 48-hour shift schedule. Some plants are working 55 and 60 hours. A few persons are working as much as 72 hours a week. It is therefore of interest to know whether there is any point at which the lengthening of the workweek actually interferes with production. What experience is available to guide public policy with reference to that length of workweek and that arrangement of working hours which is likely to produce the largest volume of defense materials? What is the apparent relationship between length of hours and health? These questions deserve consideration, quite apart from any questions relating to the rate of overtime pay.

The experience which is available with reference to the effect of overtime work on production is largely confined to British studies. It must be emphasized that these studies do not necessarily reflect

current American conditions, especially as most of the pertinent British studies were made during the last war. The tempo of American production is generally faster than that of British production. One would expect therefore that fatigue and production studies in England would show that efficiency was maintained during a longer workweek than would have been economical under American conditions. Furthermore, prior to the World War the standard workweek in England was about 48 hours. The most common American practice before the present defense program was undertaken involved a workweek of 40 hours or less.

Although the British experience does not provide the basis for determining an absolute level of hours that may be safely worked, it does indicate some of the consequences that may be expected to flow from an excessive lengthening of working hours. The British studies demonstrate that the determination of the number of daily and weekly hours which will result in a maximum of production involves essentially the element of fatigue. Once workers are fatigued, output drops drastically. The onset of fatigue, however, varies in different types of operations. The greater the demand for exertion on the part of the worker, the faster he tires.

As late as August 1940, the workers in British munition plants were employed 7 days a week and averaged between 70 and 80 hours. In spite of the emergency, however, the British Government recognized clearly the need for shorter hours:

> The continuation of 7-day working, with an average working week of between 70 and 80 hours, will quickly cause a rapid decrease in individual productivity owing to the abnormal strain. * * * It is necessary, therefore, that the average hours of work should be reduced to a lower level, the ideal being the figure which will give, under existing conditions, the maximum output. It is not easy to determine this figure, which varies according to the circumstances of different industries, but experience shows that it is materially below the general hours at present being worked on war production.[1]

Since this statement was made, hours have been lowered to 48 per week for women, and the majority of men work from 54 to 60 per week.

Keeping in mind that extensions of hours in England started from a level of 48 hours or more per week, the British experience during 1915–19 and 1940–41 may be summarized as follows:

1. Except for short periods, an extension of the usual hours of work does not give a proportional increase in output.

2. The high production level which follows with the introduction of overtime soon subsides and is followed by a production level which the worker feels he can maintain over a longer number of hours without overfatigue. Total output level may be no higher, in fact may be lower, than during the shorter workweek.

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[1] Great Britain, Ministry of Labor Gazette (London), August 1940: Hours of Work and Maximum Output.

3. Not only does production drop during extended overtime, but after the overtime has been discontinued, it takes some time to regain the higher hourly production levels. The hourly output mounts slowly, and it may take months before a steady equilibrium is attained. The adaptation time usually is shorter with simpler operations.

4. Excessive increases in working hours lead to increased lost time during work, absenteeism, and sickness, as well as to a decreased rate of production per hour of actual work.

5. The reduction in hourly output, as working hours are extended, is most pronounced on processes requiring heavy manual labor and on processes where the worker has a considerable degree of control over his speed of operation.

6. Rest periods help to maintain production at high levels, particularly if the worker can take food during these periods. Workers must rest, even while at work, and organized rest periods are better than rest periods which workers take of their own accord.

7. Continuous work by the same individuals, during all 7 days of the week, is not efficient.[2]

These conclusions relate to English workers under English working conditions. Similar findings have not yet been made in the United States. The British experience does indicate, however, some of the factors which merit careful attention during the effort to obtain maximum production in this country.

Hours and Productivity: Experience Prior to Present War

English thinking on the subject of long working hours is based on the extensive studies made during and after the World War of 1914–18. At that time the subject of hours of work proved to be the most important of all of the industrial problems affecting munition workers. Before the war, the 54-hour week had been common. During the war, 70 to 90 hours per week was the rule, 90 hours were not infrequent, and at times employees worked as long as 100 hours. Sunday labor became general, as did night work for women, which had previously been abolished for 60 years.

These long hours were accompanied by so much illness that in September 1915 the Minister of Munitions appointed a Health of Munition Workers Committee. Its objective was "to consider and advise on questions of industrial fatigue, hours of labor, and other matters affecting the physical health and physical efficiency of workers in munition factories and workshops."

The detailed findings and studies of the committee, which was succeeded by the Industrial Fatigue Research Board,[3] may be paraphrased as follows: It is possible to increase production by extensive

[2] The granting of 1 day of rest in 7 to each individual worker does not necessarily preclude the continuous operation of the factory.

[3] Known subsequently as the Industrial Health Research Board.

overtime during emergencies. But the striking increase in output rapidly deteriorates and may result in no additional production at all if continued for more than a few weeks. Prolonged overtime does not pay except during short periods of time. Cumulative fatigue is the reason for this.

A reduction of hours from high levels may lessen the total weekly output for a time. The reason for this is that workers on long hourly schedules unconsciously develop slower working tempos in order to prevent overfatigue. When the long hours are shortened, workers continue for a time to work at their previous speeds, and only gradually increase their tempo. An equilibrium of higher output may take months to attain and may not be reached for as long as a year in some cases.

Possible improvement in output during a shorter working week is found to depend largely on the degree of control workers have over speed. Where the operation is performed entirely by hand, the improvement is greatest. Where the operation consists entirely of a machine process, the output depends not so much on the working hours of employees as on hours of machine operation. It has proved impossible, therefore, to develop a hard and fast rule for all types of work and all occupations.

One of the studies during the last war covered 100 experienced operators on capstan lathes, turning aluminum fuse bodies. All of these operators were women. The study extended over 93 weeks. During 24 of these a 74.5-hour week prevailed, including 8 hours on Sunday; for 28 weeks, 63.5 hours were worked, also including Sunday; and for 41 weeks, 55.3 hours were worked, with no work on Sunday. The output during these periods is summarized in table 1.

TABLE 1.—*British Experience on Weekly Hours of Work and Output in the Turning of Aluminum Fuse Bodies* [1]

Hours in plant	Hours of actual work	Average output per hour	Average weekly output	Increase in weekly output
				Percent
74.5 hours	66.0	108	7,128	0
63.5 hours	54.4	131	7,126	0
55.3 hours	47.5	169	8,028	13

[1] Industrial Welfare (Westminster, England), December 1939, Hours of Work in War Time, by H. M. Vernon.

The difference between the "hours in plant" and "hours of actual work" figures is due to time taken out in stoppages, rest, etc. It is to be observed that these operators accomplished as much when actually working 54.4 hours per week as they did formerly when actually working 66 hours. Still more important, they produced

13 percent more when working only 47.5 hours. When spending 74.5 hours in the plant, fully 8.5 hours went for stoppages and rest pauses. On the 63.5-hour week, although the unproductive time was slightly larger, amounting to an average of 9.1 hours, the average hourly production for time actually worked increased by 21 percent, leaving the weekly output unchanged. On the 55.3-hour week, the time for stoppages was somewhat less—7.8 hours—but hourly output averaged 56 percent more than on the 74.5-hour week, and total weekly output was 13 percent larger. Thus, a reduction in weekly hours of nearly 26 percent, from 74.5 hours to 55.3, resulted in a production increase of 13 percent per week. At the rate of 169 units per hour, which prevailed under the shorter workweek, the production of 7,128 units of the 74.5-hour week could have been accomplished by 42.2 hours of actual work, or 49 hours at the plant, if the same proportion of idle time is allowed as during the 55.3-hour week. Considering the decrease of idle time with the reduction in hours, it seems entirely likely that as much could have been produced during a workweek of 48 hours as during a workweek of 74.5 hours.

Another operation studied involved young persons engaged in light work at semiautomatic machines.[4] The operation was that of boring top caps. About 4 times a minute a top cap was unclamped from a machine and another clamped on. These two operations took less than 2 seconds. The four operations per minute consumed 8 seconds. The other 52 seconds the operators stood at the machines, waiting. The operation was studied first on a 12¼-hour day and later on a 10-hour day. During a 76.8-hour week, 70.6 hours were spent on actual work, with a weekly production total of 7,413 units. During the 60.1-hour week, actual working time was 54.5 hours, and the weekly output 6,922 units. In spite of an increase in hourly production of 21 percent, the weekly total dropped by nearly 7 percent. The increase in hourly production was due to a decrease in the time taken for starting and stopping work and for voluntary rests. This method of saving time was observed in all operations when hours were shortened. This study, then, illustrated that when workers have little control over machine speeds, total weekly production depends largely on hours of machine operation. But even with this limitation, the weekly production under the 76.8-hour week could have been accomplished in only 65 hours at the plant, with the hourly production rate and stoppage percentage of the shorter workweek.

An operation involving heavy manual labor was that of sizing fuse bodies, performed entirely by men. The operation consisted of screwing a fuse body into a steel cap. The operators could work as fast as they liked, as the operation was entirely manual. Owing to

[4] Industrial Welfare (Westminster, England), December 1939: Hours of Work in War Time, by H. M. Vernon.

the heavy nature of the work, these employees worked 12 hours on some days and 10 on others, with intermittent Sunday labor. Subsequently these hours were changed to 10 per day, and still later Sunday work was eliminated. Table 2 summarizes the results obtained over a 13-month period.

TABLE 2.—*British Experience on Weekly Hours of Work and Output in the Sizing of Fuse Bodies* [1]

Hours in plant	Hours of actual work	Average output per hour	Average weekly output	Increase in weekly output
				Percent
66.7 hours	58.2	100	5,820	0
62.8 hours	50.5	122	6,161	6
56.5 hours	51.2	139	7,117	22

[1] U. S. Bureau of Labor Statistics Bulletin No. 249: Industrial Health and Efficiency. Final Report of the British Health of Munition Workers' Committee. Washington, 1919.

In this case a 15-percent decrease in time at the plant resulted in a 22-percent increase in total weekly output. The explanation for this was a 39-percent increase in hourly output and a decrease in wasted time from 8.5 hours per week to 5.3 hours. It should also be observed that the actual working time during the 56.5-hour week was longer than during the 62.8-hour week. The 5,820 units of weekly production during the longest working period could have been produced in 42 hours of actual working time, or in about 46½ hours including time for stoppages, at the production rate during the shortest week. In other words, during the 66.7-hour week fully 20 hours were wasted because the same production could have been accomplished in a workweek of 46½ hours.

A case for operating 3 shifts instead of 2, when the total hours of plant operation remained about the same, was presented in a study involving "ripping" of 6-inch shells.[5] The operation consisted of cutting off the end portion of a forged shell, thus reducing it to size. The cutting operation was automatic, but placing the shells on and off the machines, even with the use of pulleys, was heavy work. The study covered 43 woman operators in 2 plants. For part of the period, a day shift worked 59 hours and a night shift 63 hours, totaling 122 hours of plant operation. For the rest of the period, a morning shift worked 38 hours, an afternoon shift 32½ hours, and a night shift 48 hours, totaling 118½ hours of plant operation. Under the first scheme the cutting time per shell was 5 minutes and 2 seconds, and the handling time 2.31 minutes. Under the second scheme, the cutting time remained the same, but the average handling time was reduced to 1.86 minutes.

[5] Great Britain. Industrial Fatigue Research Board. Bulletin No. 2: The Output of Women Workers in Relation to Hours of Work in Shell Making, by Ethel E. Osborne. London, 1919.

Under the first scheme, the average hourly output per worker for 122 hours was 7.90 shells. Under the second scheme it was 8.65. The total output for 2 workers under the 2-shift, 122-hour week was 964 shells. Under the 3-shift system, the total output for the 118.5-hour week was 1,025 shells. The increase in hourly production was 9.5 percent, and for weekly production 6.3 percent in spite of a reduction of 3½ hours in operating time. This result was accomplished regardless of the fact that the workers could control speed during only about one-third of the time.

A more recent illustration of the effect of cumulative fatigue on plant output was cited by Dr. J. C. Bridges, Senior Medical Inspector of Factories of Great Britain.[6] In March 1938, a company obtained a large contract which it believed would require working its employees for about 60 hours a week. Production rose steadily to a peak period in June, which lasted 2 weeks. From then on, production dropped steadily until October, when overtime was discontinued because production at this point was not as great as it had been early in March under the 47-hour week. Simultaneously, the illness rate increased by 10 percent. As a result of cumulative fatigue, both piece and time workers alike appeared to have no interest in their jobs and to be doing their work mechanically.

Studies in later years in a number of other industries, including iron and steel, glass, and laundries, confirmed these earlier findings. The British experiences during the last war as well as the results of the studies made in peacetime were summarized in 1938 by the Industrial Health Research Board of the Medical Research Council.[7] A similar survey was issued early in 1940 by the same body,[8] apparently in the attempt to persuade England not to overlook the lessons of the past during its intensive effort to rearm. On the subject of rest periods, the latter report concluded:

> An unbroken spell of 4½ to 5 hours is generally too long. Man must rest, even at work. In some kinds of work the man can pause to "stand easy" from time to time—or may have pauses thrust upon him, e. g., by having to wait for material; but organized rest pauses have been proved much more effective both to efficiency and health. The number and duration of rest pauses depend on the nature of the work, but as a rule rests of 10 or 15 minutes about the middle of the morning and afternoon periods have been found to give satisfactory results. In some cases a break of 5 minutes every hour has been found better.

Rest pauses of 5 to 10 minutes in the middle of a spell increased daily output from 5 to 10 percent. In conveyor or machine operations, however, a pause of 5 minutes every hour was found to be more beneficial than a single 10- or 15-minute pause in the middle of the

[6] Industrial Welfare (Westminster, England), January 1940: Workers' Health in War Time, by J. C. Bridges.

[7] Great Britain. Industrial Health Research Board. Eighteenth Annual Report. London, 1938.

[8] Idem, Emergency report No. 1: Industrial Health in War. London, 1940.

spell. The Board also found that when piece rates were substituted for time rates, output increased considerably and that output was sharply reduced when a return was made to time rates.

On the basis of experience prior to the present war, H. M. Vernon, a well-known English investigator, estimated the following hours as best for English workers:[9]

Women.—Where considerable hand work is involved, optimum hours appear to be 48 or less. Where the work requires only a small element of hand work, 54 hours is probably the optimum.

Men.—For jobs requiring skill but no great physical effort, men could probably work 60 hours without overfatigue. But on heavy physical work, hours should not exceed 48. For the same degree of physical effort, men can work longer than women.

It is to be noted, however, that these hours make allowance for voluntary rest periods during work which appear to be far in excess of the practice in the United States.

Hours and Productivity: Experience During the Present War

Pressure for increased hours of work existed in Britain from the beginning of the present war.[10] By the spring of 1940, working schedules of 60 hours per week were fairly common. A more intensive drive for munitions production occurred in May 1940, with the result that the 12-hour day and 7-day week became the rule in the war industries. For a short time the effect on production was favorable. Within 2 months, however, there was a general complaint of absenteeism and the Minister of Labor answered the charge by stating that exhaustion of workers was one of the causes.[11] By this time the Minister of Supply had concluded that "neither in the interests of the workers themselves nor in the interests of maximum output could a week of 7 days be worked indefinitely." A gradual reduction of working hours in Government arsenals had been arranged and the Minister of Supply hoped that similar arrangements could be worked out in all of the private factories working under the control of the Government.[12]

The initial plan for reduction in hours was to relieve men who were working 84 hours per week in munitions plants by a system of rotation, and to restore the legal limitations of the working hours of women and young persons to the pre-war standards of 48 hours per week. It was also hoped that the effect of long hours might be minimized by requiring the employment of doctors, nurses, and health officers in specified factories. Mr. Bevin stated that "experience in manu-

[9] Industrial Welfare (Westminster, England), December 1939: Hours of Work in War Time, by H. M. Vernon.

[10] For an account of the relaxation of legal limitations on hours of work in Great Britain, see U. S. Department of Labor, Wage and Hour Division Annual Report, pp. 35-41.

[11] London Daily Herald, July 26, 1940.

[12] London Times, July 26, 1940.

facturing fields points to 55 or 56 hours being the optimum hours of a working week." [13]

A model scheme for an immediate reduction of working hours to 60 per week and an ultimate reduction to 55 or 56 hours was worked out by a consultative committee representing the Trades Union Council, the British Employers Federation, and the Government. Progress in securing an actual reduction of hours, however, appears to have been slow. On September 18, 1940, Mr. Bevin stated: "I think the amount of overtime being permitted now means a great strain and I would urge industry, as the further volume of trained labor becomes available, to give continuous consideration to it." [14] More recently, the subject of reducing the hours of individual workers received the attention of the Parliamentary Select Committee on National Expenditures.[15] A report of this committee urges that the hours of work be reduced before the health of munition workers is impaired as was the case during the last war.

DAY OF REST

British experience has demonstrated that continuous work of individuals during all 7 days of the week is not economical. Some instances have been cited in which the elimination of Sunday work, coupled with a general reduction of weekly hours, actually resulted in a larger weekly output. In a study of woman fuse workers during the last war, it was found that they produced as much in 10 hours as they formerly had in 12 hours per day, and that when Sunday work was abolished output increased still further by 13 percent. The conclusion reached was that if maximum output was to be obtained and maintained for any length of time, a weekly period of rest had to be allowed. Except for short periods, continuous work is believed to be "a profound mistake and does not pay. Output is not increased." [16]

ILLNESS AND ACCIDENTS

As already stated, the British investigations were started because of alarming increases in illness among munitions workers during the last war. The same findings have been reiterated during the present war. The usual complaints resulting from excessive hours, and therefore insufficient rest and recreation, are headaches, pains in the back, legs and feet, indigestion, palpitation, and difficulties in sleeping.[17] A considerable increase in the consumption of alcoholic liquors has also been observed.

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[13] Manchester Guardian, July 30, 1940.

[14] Great Britain, Ministry of Labour Gazette (London), October 1940, p. 26.

[15] Great Britain, Parliament, Third Report from the Select Committee on National Expenditure, Session 1940–41, London, 1941. For further details see Monthly Labor Review, May 1941, pp. 1155–1159.

[16] U. S. Bureau of Labor Statistics. Bulletin No. 249: Industrial Health and Efficiency. Final Report of the British Health of Munition Workers' Committee. Washington, 1919.

[17] Industrial Welfare (Westminster, England), June 1940: Psychological Problems of Industry at War, by J. R. Rees.

A specific illustration of the variation of sickness with the length of the workweek was furnished by H. M. Vernon. The results are summarized below:

Workweek:	*Percent of time lost from illness*	
	Men	*Women*
63¼ hours	7.0	---
62 hours	5.7	6.4
54 hours	4.0	4.3
44 hours	---	3.1

These data indicate that the percent of time loss because of illness during the shortest workweek was only half of the loss for the longest hours.[18]

As for accidents, the British data are not conclusive. One of the investigators tabulated over 50,000 accidents treated at 4 factories. He found that during a 12-hour day women had almost 3 times as many accidents as during a subsequent 10-hour period. But no such proportional excess was observed for men. The investigators did not relate industrial injuries to exposure.

It was found, however, that temperature had a very decided effect on the frequency of accidental injuries. These were found to be at a minimum at about 67°. With the fall of temperature, the number of injuries increased gradually until at 52° they were about 33 percent more numerous. At temperatures above 72°, accidental injuries increased rapidly for men, but only slightly for women.[19]

[18] Industrial Welfare (Westminster, England), February 1940: Sickness and Accidents Amongst Munition Workers, by H. M. Vernon.

[19] Great Britain. Industrial Fatigue Research Board. Report No 19: The Influence of Temperature and Other Conditions on the Frequency of Industrial Accidents, by E. E. Osborne and H. M. Vernon. London, 1922.

INTERSTATE MIGRATION OF WORKERS

THE mass migration of United States citizens, which has become of increasing seriousness during the past decade, is one of the important domestic problems which requires immediate attention and therefore cannot be postponed for the duration of the national defense emergency. This was pointed out in the final report of the Select Committee of the House of Representatives appointed in May 1940 to investigate the problem of workers' migration.

The investigation showed that these movements of large numbers of American families originated in a variety of deep-seated causes in many areas, most of these causes being related to declining economic opportunities. In agriculture, natural causes such as drought and soil erosion have been most spectacular, but the continued decline in agricultural markets is said to have been probably more continuously responsible for migration. Migration among urban residents had its origin largely in the unemployment problem in the thirties. This migratory movement involved hundreds of thousands of families every year, many of whom ultimately bettered their condition, although most of them suffered severe hardships in the process of migration.

The national defense program has had the effect of stimulating the migratory movement, as it offers new hope of jobs in the defense industries. The current migration is out of proportion to the needs of the defense industries and is creating problems in the communities in which these industries are located; facilities for housing, sanitation, education, and recreation are being overloaded. When the expansion connected with the defense program ends and the national economy shifts back from armament production to production of consumer goods, it is stated, "the numbers of people migrating away from declining economic opportunity will rise far above the large-scale migrations of the thirties, unless Congress and the American people profit by the lessons of destitute migration in the last decade." The areas from which these people are moving to the defense areas continue to be the areas of out-migration which the committee studied in detail. The increase in population in some of the smaller communities near Army cantonments has amounted to as much as 300 to 1,000 percent in the space of a few months.

In the congressional hearings on the community facilities bill, it was testified that "at least 1,500,000 will migrate to the smaller communities adjacent to military establishments and new defense industries now in process of development."

As the demand for defense workers is stimulated, the country will approach nearer to full-time employment. Women will be substituted

in certain industries and older unemployed workers will succeed that labor which is drawn off into defense or military occupations. These untapped labor reserves and such groups as rural low-income families, aliens, and Negroes will be employed in nondefense industry, which will in turn lead to new migratory movements. It was the committee's belief that these problems of defense migration are a matter of direct concern to the Congress, and that the facilities of agencies now moving to meet these problems will require extension and increased support if they are to formulate a workable plan by which cooperation among Federal, State, and local authorities can alleviate the hardships created by expansion. An agency which can be of service in checking the aimless movement of ill-informed job seekers is the United States Employment Service, but the problems created by those who move without adequate information must be met with the help of the Federal Government. It is pointed out that long before the national emergency is over many communities will be faced with a completion of their immediate defense jobs, and sizable groups of people will be stranded in these communities These people will have lost their settlement rights in the communities from which they have come, without having attained such rights in the communities to which they have moved. As a result there will be demands for some provision by the Federal Government to induce the States to enact uniform settlement laws and for the appropriation of Federal funds to assist these communities in meeting this new burden or to assist the stranded persons in returning to their own homes. This state of affairs, it is said, may be localized during the period when defense orders are expanding but will certainly become serious long before the emergency is over. "Whenever emergency spending comes to a halt, moreover, the problem will strike with full force and the Nation must be prepared to meet it."

Recommendations

The recommendations of the committee as a result of its investigations covered three types of measures as follows: (1) Measures to forestall, as far as possible, unnecessary migration of large groups of people whom the committee has designated in its preliminary report [1] on January 3, 1941, as "potential migrants"; (2) measures to alleviate the condition of migrants now on the road; and (3) measures designed to assist these migrant people to secure a new start or at least to stop their wanderings.

In order to meet the problems presented by present migrants and the new migrant army of even greater numbers which will be released when the defense emergency is over, the committee recommended that—

[1] For a summary of that report, see Monthly Labor Review, February 1941 (p. 338).

(1) Measures to care for migrants while they are employed either in industry or agriculture should include legislation to regulate the activities of interstate labor contractors. It urged also an extension of the camps for agricultural migrants developed by the Farm Security Administration, as the committee considered that Government camps serve as a model for private camps and a means for setting new local standards of housing and sanitation. A fourth category of public assistance should also be established under the Social Security Act, to provide general relief for nonsettled persons.

(2) To care for potential migrants in agriculture, the extension of the activities of the Farm Security Administration for low-income farm families should include the reduction of the case load for loan supervisors and an increase in the annual number of new clients under the program and, also, the continuance and extension of water-conservation and pump-irrigation work as well as provision for public aid in reclamation projects.

(3) For migrant families which are trying to get a new start and whose return to their point of origin is not practicable, it was considered that an opportunity should be given to return to independent farming, to the limit of available facilities, either on reclamation projects or under the Bankhead-Jones tenant purchase program or under other approved methods. For both agricultural and nonagricultural migrants who wish to gain residence and secure settlement rights which will enable them to stop moving from State to State, the committee recommended the enactment of legislation to provide general relief under the Social Security Act for nonsettled persons, with Federal grants-in-aid to those States which comply with a uniform settlement requirement.

Other Proposals

There were several points to which the committee called attention but on which it did not wish to recommend to Congress the extension of existing legislation or the enactment of new laws.

These questions included the need for increased diversification on farms, particularly among low-income farmers; the need for greatly increased vocational training and guidance among young people in both agricultural and industrial areas; the enactment of laws establishing minimum standards of health, sanitation, and housing on private farms in those States which have heavy in-migration of agricultural workers; and the use of lands, held as a result of tax forfeiture, for settlement of homeless families, as under the Land Policy Act adopted in 1939 by the State of Arkansas.

In conclusion it was stated by the committee that it "recognizes that in a complex interdependent economy such as our own there are

many factors which contribute to large-scale migration. Viewed from this standpoint, the solution of the problem of migration is interwoven with the larger problem of unemployment. On this premise it may be said that any policies of government capable of bringing about fuller employment in industry and providing adequate outlets for agricultural products would also contribute to the solution of the problem of migration."

UNION-MANAGEMENT COOPERATION [1]

THE term, union-management cooperation, is generally considered to mean more than the development of harmonious relations between employers and unions or the establishment of machinery for the peaceable adjustment of differences. It usually refers to programs of joint participation of labor and management to improve the economic condition of a company or an industry, thereby bringing benefits to both employers and workers. Such cooperation represents an extension of collective bargaining into a sphere that traditionally has been considered the exclusive jurisdiction of management, and usually concerns production problems. The object may be to eliminate waste, to improve the quality of production, to increase output, or to modernize equipment. Less frequently it may involve the loan of union funds to a company, the sponsoring of a sales and advertising campaign, or collaboration for legislation favorable to the industry.

During earlier years organized labor generally viewed with suspicion any talk of increasing efficiency and sharing responsibility in management, although there were instances of united effort to secure favorable governmental action, particularly tariff legislation. A contributing factor in the sentiment against union participation was the attitude of the early proponents of scientific management who considered unions unnecessary and ignored them as a factor in management improvement plans. Although the unity of interest between labor and capital was often proclaimed, most business enterprises were conducted on the principle that the employer should "run his own business" with no "interference" from the outside or even from his own employees.

It was not until the 1920's that union-management cooperation came to the attention of the public. The most prominent examples were in the shops of the Baltimore & Ohio Railroad, the ladies' garment industry of Cleveland, and the men's clothing market of Chicago. In general, however, the movement was limited and the depression of 1929–33 ended many of the experiments.

Within recent years union-management cooperation has again gained some recognition in several industries, including the railroads, the manufacture of men's and women's clothing, hosiery, textiles, millinery, steel, and the printing industry. The underlying cause of this revival of interest has been the new status and growth of unionism. Some employers, who hitherto fought unionization, have concluded that unions have become a permanent factor in our industrial life and should therefore be given the opportunity to share in the responsibility of solving some of industry's problems. Many union

[1] Prepared in the Bureau's Division of Industrial Relations, under the direction of Florence Peterson chief.

leaders are also insisting that organized labor be allowed increased participation and responsibility in the management of industry.

Although there are a number of successful instances, union-management cooperation remains the exception rather than the rule in American industry. Three major factors are responsible: (1) Foremost is the fact that cooperation presupposes the sincere acceptance of unionism and collective bargaining by the employer. Unions whose survival is still in danger are not disposed to cooperate with management. (2) Union-management cooperation usually means that the employer must share with the union certain executive functions which he long has exercised without restriction. Some employers regard this as a reflection upon their administrative and executive ability. Many employers do not believe that labor is capable of making a worthwhile contribution in the managerial field. Others think that the suggestion-box method, with bonuses or prizes for good ideas, is sufficient. Most companies prefer to restrict union activity to the adjustment of grievances and the negotiation of wage and hour issues. (3) Many union leaders and workers fear that cooperation in the introduction of more efficient production methods will lead to lay-offs and increases in the work loads of those who are retained. Although most union leaders realize that over a period of years the economic welfare of employees depends on the profit status of the company or the industry, they believe that the union's function should be to protect workers from speed-up and unemployment rather than to participate in programs which might bring these results.

The basis of union-management cooperation has consequently varied from establishment to establishment and from industry to industry. Occasionally, it has been adopted only as a last-minute preventative of company bankruptcy and the loss of jobs for scores or hundreds of employees. Sometimes, as on the railroads, regularization of employment and reduction in the amount of work contracted out have been the incentives. Competition threatening union standards has been a particularly significant factor. In the hosiery and textile industries, cooperative programs have been developed to enable the union mills of the North to compete with the unorganized mills of the South which possess newer and more efficient equipment as well as lower wage scales. In the men's and women's garment industries, such programs have been instigated to forestall wage reductions and increased hours in "high cost" or poorly managed establishments, to raise the standards of newly unionized plants to the general level of the industry, and to enable the union market to compete with nonunion firms.

An evaluation of union-management cooperation and prophecy of its future are difficult. Although such cooperation is still in an experimental stage in American industry, it has had outstanding

successes as well as failures. Undoubtedly, it is a complicated matter with many potential pitfalls. Mere agreement upon a plan is no guaranty of success. Rank and file workers tend to be suspicious of union leaders who collaborate too closely with management. Management supervisors frequently are unable or unwilling to adjust themselves to the new restrictions on their authority. A tactful and skillfully conducted educational program is needed to get results. Sometimes the initial progress in increasing efficiency arouses enthusiasm, but when the markedly noticeable results decline, interest in the program dies away and the arrangement may be discontinued. Where it has been tested and found worthwhile, the long-run value frequently has been less in the economies achieved than in the improvement in employee morale and in the tone of union-management relations.

Experiments With Union-Management Cooperation

Union-management cooperation is rarely described in detail in employer-union agreements. When mentioned at all, it is usually discussed in the most general terms. Most of the plans now in operation have been worked out subsequent to the signing of the agreements, which may or may not have included general permissive or obligatory clauses for their adoption.

Because of the dearth of information in written employer-union agreements and the fact that no general survey has been made to discover where such plans exist, it is not possible to give a comprehensive account of the union-management cooperation programs now in effect in American industry. Following is a brief summary of some of the better-known plans. Since the Bureau of Labor Statistics has not studied their operation first hand, no attempt has been made to evaluate their effectiveness, although in some cases the judgments of the parties directly concerned have been cited.

The nature of these programs obviously depends upon their goal as well as by whom initiated. Some are designed to solve a single problem; others are intended as continuing arrangements for solving any appropriate problem which may arise from time to time. Some plans are initiated and administered by trade associations and the national union leaders; others by single employers or plant managers in cooperation with local union officers.

The major plans may be classified into three general types, according to goal and method used:

(1) Elimination of wasteful methods and plant inefficiencies through joint shop committees;

(2) Introduction of new machinery and processes through joint research;

(3) Comprehensive programs for improvement of business through combined employer-union efforts.

ELIMINATION OF WASTE THROUGH SHOP COMMITTEES

Baltimore & Ohio Railroad.—Perhaps the most widespread type of union-management cooperation is concerned with the elimination of wasteful and inefficient methods of production through shop committees. The Baltimore and Ohio plan was the first of these to achieve prominence and it has been copied by a number of establishments. Originated by an industrial engineer, it was supported by the railroad unions as a means of regularizing employment by making practicable the retention of work in the company's shops instead of contracting it out. First tested in 1923 in a single shop, the plan was subsequently extended over the entire B & O system. Structurally, it is composed of a system-wide joint committee, with similar committees for each shop. (These committees do not concern themselves with the ordinary problems of collective bargaining, such as wages, hours, discharge, and lay-off.) At periodic meetings suggestions and criticisms are brought up relating to shop conditions and work methods. Through this program, it is maintained, the company has not only attained a greater efficiency by the regularization of work and the reduction of waste, but has also eliminated a large amount of friction and dissatisfaction.

Westinghouse Co.—For some years the management of the East Springfield, Mass., division of the Westinghouse Electric & Mfg. Co. had been concerned over the problem of defective materials and workmanship and other wasteful practices. Disciplinary measures, such as discharges and pay reductions, proved unsuccessful. In 1937 the company asked for cooperation from the union, a local of the United Electrical, Radio and Machine Workers which had existed in the plant since 1933.

A planning committee was formed, consisting of the works manager, the supervisor of industrial relations, and two union leaders. Meetings were held with superintendents, foremen, and union shop representatives on every shift. Departmental "scrap" committees composed of foremen, union representatives, and time-study experts were established, with the foremen acting as chairmen in some departments and the union representatives in others. Department meetings were held weekly, during which current defective apparatus was exhibited and analyzed. Employees responsible for damage were often brought in and shown how to remedy their mistakes. Any troubles traceable to errors or oversight of management were brought out and discussed as freely and fully as those due to workman failure.

These efforts have resulted in a substantial reduction in waste and defective workmanship, to the profit of both the company and the workers. Even more important has been the improvement in the

tone of collective bargaining as the parties became increasingly familiar with each other's problems.

Die-casting workers.—The National Association of Die Casting Workers and the Pottstown, Pa., plant of the Doehler Die Casting Co. recently entered into an agreement jointly to finance research in production problems. The board of directors of Management-Labor Research, composed of seven management representatives and seven union representatives, is to have access to the company's books and to be fully advised on all plans of the company as they may affect the plant or members of the union. Handling grievances is outside its purview except where "it is clearly shown that the grievance is a result of management policy," in which case it "may investigate and make recommendations on the management policy but under no circumstances shall it investigate and make recommendations on the grievance."

The immediate task of the Management-Labor Research is the problem of rejected goods, scrap castings caused by faulty dies, tools, and other equipment, as well as suggestions turned in by employees. It also expects to make studies of contemplated new installations to discover how such installations will affect production costs and employment.

RESEARCH FOR INTRODUCTION OF NEW MACHINERY AND PROCESSES

In the above examples of union-management cooperation, the installation of new processes and machines has merely been one of several methods to attain greater efficiency. In a number of industries, however, new labor-saving improvements have been the focal point of cooperation, although problems of waste and defective work are also included. One such effort, described below, which received a great deal of publicity during its early experimental stage, failed a few years after its inauguration.

Naumkeag Co.—In 1928 the Naumkeag Steam Cotton Co., manufacturers of "Pequot" sheets, decided that the only way to meet severe competition was to reduce costs by assigning more looms or frames to an operator. The proposal meant the dismissal of about 250 people. The United Textile Workers, keenly aware of the competitive factor, turned to an industrial engineer for advice. He recommended "joint research" under the direction of a neutral outside technician to explore all possibilities of economy and to establish new job standards. The net result of this program was a gradual installation of the new method of production with a minimum displacement of workers. At the same time the company was stimulated to improve its sales department and make other economies. Owing to the depression and other causes, however, the rank and file of workers revolted against the so-called "stretch-out." The "joint research" program came to an end in 1932. An attempt to revive it, 2 years later, led to a bitter strike.

Hosiery.—A more recent experiment with cooperation in research is found in the full-fashioned hosiery industry. Here the union mills of the North found themselves unable to meet the competition of the nonunion mills of the South, owing partly to the cheaper labor supply of the latter and partly to their more modern equipment and more intensive use of this equipment. Since the union did not have the southern mills under agreement, it was forced to make rate concessions to the northern manufacturers to enable them to meet this competition. The union felt that by encouraging northern employers to modernize their plants, they would be able to raise or at least maintain the earnings of their members. The union therefore agreed in the 1938 agreement with the full-fashioned hosiery manufacturers to modify its prevailing national wage scale to permit local adjustment of piece rates and job standards, on condition that the employers exert all possible energy in the direction of installing new equipment. Earnings, however, were not to be less than those which existed prior to such improvements.

Printing pressmen.—The pressmen's union has cooperated with management in several ways. Since 1912 the union has operated a technical trade school at its headquarters which many employers utilize by sending their best men to it for specialized training. In addition, considerable aid is given to employers by the school's staff of technical experts, both through correspondence and through actual plant visitation.

In 1924 the union established a special engineering service for newspaper pressmen and employers, partly to counteract employers' claims that they could not afford to pay higher wages, and partly to protect union members from criticism and discharge for faulty production for which they were not responsible. Each day about 400 newspapers are examined at the union headquarters for defects of appearance or workmanship. If a defect continues to appear, the company is informed and advised how to remedy the matter. Where necessary an engineering expert is sent to the plant. The union also offers technical assistance, without cost to the publisher, when new plants are being constructed, when new equipment must be installed, or when old machinery needs overhauling. Through this service thousands of dollars are saved each year.

Steel workers.—Since 1937 the Steel Workers Organizing Committee has sought from management an opportunity to participate more fully in the consideration of production problems. The union has outlined a policy whereby more efficient production could be attained both in individual establishments and in the entire industry. It has laid down several conditions, however, as indispensable to any program of cooperation: (1) Complete recognition of the union as a permanent and responsible institution, (2) sharing of all savings obtained through

cooperation by increasing employment, improving working conditions, increasing wages, or decreasing hours, (3) gradual installation of labor-saving plans during busy periods when displaced workers will have opportunities to get other jobs, (4) genuine cooperation through a joint research committee, with all facts and plans revealed to the union representatives and each step taken only after a mutual understanding.

Only a few of the organized steel establishments have accepted the S. W. O. C. proposal but, according to the union, wherever the plan has been adopted, there has been a noticeable increase in efficiency and in three cases bankruptcy was prevented. As an example, the S. W. O. C. cites the experience of an establishment in Pittsburgh manufacturing automatic water heaters. Since the introduction of the cooperation program, in 1937, waste has almost been eliminated and production has increased from 55 units per day to 125 per day, with no increase in the number of assembly employees. The company's net profits in 1940 equaled the net losses of 1937. Average hourly earnings rose 6½ percent while average annual earnings rose more than 30 percent—from $860.75 in 1937 to $1,163.30 in 1940.

Comprehensive Programs for Improvement of Business

More comprehensive union-management cooperation programs deal not only with improved efficiency within the plant, but also seek to improve the competitive position of the company, or a segment of the entire industry, by tackling sales and marketing problems, methods of stabilizing the industry, fair trade practices, etc. The clothing industries offer the best examples of this broader type of cooperative program although experiments have been made elsewhere.

Rocky Mountain Fuel Co.—The cooperative plan at the Rocky Mountain Fuel Co. was initiated by an employer who was friendly to union organization at a time when neighboring, competing coal companies were engaged in bitter strife with their workers. In order to meet the competition offered by these nonunion mines, the United Mine Workers entered into an agreement in 1928 wherein it recognized the duty of the union and its members to cooperate with management to attain maximum efficiency. The union has not only helped to eliminate waste and reduce costs, but has conducted sales campaigns and upon occasion has lent substantial sums of money to the company.

Millinery industry.—In 1936 the United Hatters, Cap and Millinery Workers International Union and several associations of millinery manufacturers in New York City and New Jersey signed an agreement which established a Millinery Stabilization Commission, consisting of three neutral persons, to study the economics of the industry and to

formulate fair trade practices and to stabilize and rehabilitate the metropolitan New York millinery industry. The commission issues a label to employers who abide by the fair trade practices established by the commission. The employers and the union have agreed that no worker may work on any hats which do not bear the label. A joint advisory board of employer and union representatives was also created. In 1940 the agreement was renewed for 3 more years.

Men's and women's clothing industry.—The men's and women's clothing industries present examples of union-management cooperation of a nature which provide maximum union participation without disrupting the employer-employee, profit-wage relationship. Several reasons account for the high degree of cooperation in these industries. The cutthroat competition among a large number of small units of production has made the employers responsive to plans for the establishment of uniform shop standards and marketing methods. The prevailing piece-work method of wage payment in the industries is also an important factor; when earnings are directly and immediately related to daily output, the workers are constantly aware of hindrances to maximum production, such as run-down machinery and inefficient shop procedures. Underlying these factors is the presence of strong, stable unions which have been alert to attack some of the underlying causes of poor working conditions.

In the men's clothing industry, the Amalgamated Clothing Workers has been able to establish an industry-wide system of job and wage standards and has sent its technical experts into various plants to renovate managerial practices and advise employers on sales and price policies. It has lent money, upon occasion, to save bankrupt firms and has assisted in the introduction of efficiency and waste-elimination programs. When such innovations have resulted in fewer jobs, the union has cooperated with the management in working out an orderly procedure for the reduction of the working force, usually with the provision that laid-off workers be given a dismissal wage. An outstanding example of this was the case of the Hart Schaffner & Marx Co., in 1926, when several hundred cutters were dismissed, after the payment of dismissal wages, upon the introduction of new labor-saving procedures agreed upon by both management and the union.

The recent agreement between the International Ladies' Garment Workers' Union and manufacturers of the New York City dress market provides an outstanding example of extensive union-management cooperation. As a result of months of study by union engineers and discussions with management, the union proposed a comprehensive plan to increase the efficiency and sales of the New York City dress industry. These proposals culminated in the agreement signed in February 1941, which requires employers to provide well-lighted

and ventilated workplaces, fewer interruptions resulting from lack of supplies, and modern equipment. The union and the association are to draw up rules and regulations governing management efficiency which will be administered through the impartial chairman who has authority to assess damages for noncompliance. In addition, a fund of $1,000,000 is to be raised annually to promote the sale of the products. The union has offered to contribute $100,000 from its own treasury to this fund. It is hoped in this way to reduce the employers' costs, increase the workers' earnings, and place the New York industry on a better competitive footing with other parts of the country.

FEDERAL PERSONNEL BY TYPES OF WORK PERFORMED

By KATHRYN R. MURPHY, *Bureau of Labor Statistics*, and MELTON M. GORDON, *Civil Service Commission* [1]

Summary

FEDERAL personnel in all types of activities except those which are primarily for national defense increased a little more than 4 percent between December 1939 and December 1940. This increase in personnel was accompanied by a rise in monthly pay rolls of nearly 5 percent.

Employment and pay rolls for these activities outside of national defense have been subdivided into 15 major groups according to the types of work performed. The largest proportionate increase in personnel among these 15 groups was for general information and research services, which had 145 percent more employees in December 1940 than at the same time in 1939. Additional workers hired to prepare the results of the decennial census accounted for this increase. General government, law enforcement, regulatory services, labor and ndustrial relations, health, the Postal Service, other public-service enterprises, and education and reference services all expanded their employment and pay rolls between December 1939 and December 1940.

On the other hand, several types of Federal activities were carried on with fewer workers in 1940 than in 1939. Personnel was reduced in public works, Indian services, agriculture, welfare, industrial and commercial development, and conservation. Monthly pay rolls also declined in all of these activities except agriculture and welfare for which there were very slight increases.

The number of civilian employees in national defense activities was almost 86 percent greater in December 1940 than at the end of 1939. Pay rolls for these workers increased 95 percent in the same period. Personnel in the armed services increased nearly 110 percent during the 12 months ending with December 1940; the corresponding rise in pay rolls was about 90 percent.

[1] Prepared under the direction of Herman B. Byer, chief of the Division of Construction and Public Employment, United States Bureau of Labor Statistics, and Archie C. Edwards, chief of the Statistical Division, United States Civil Service Commission; Carol P. Brainerd, technical adviser on the State, County, and Municipal Survey acted as consultant on the functional classification.

For all types of activities carried on by the Federal Government there was a net increase of almost 47 percent in personnel—both civil and military—between December 1939 and December 1940. This was accompanied by a rise in monthly pay rolls of only 32 percent. The increases over the 12-month period of 661,000 persons and of more than $58,000,000 in monthly pay rolls resulted in a total personnel of 2,078,500 for whom the Federal Government had a pay roll of $242,182,000 in December 1940.

Scope and Method of Study

This is the second in a series of articles [2] dealing with Federal employees which has been undertaken jointly by the Bureau of Labor Statistics and the Civil Service Commission. In the present study personnel in the executive, legislative, judicial, and military branches of the Federal Government during two different periods—December 1939 and December 1940 [3]—have been classified in terms of the type of service they render to the public. The present article is thus more extensive in coverage than the first, which was limited for the most part to civilian employees in the executive branch of the Government.

Part-time, temporary, and force-account workers, and consultants on a fee basis, as well as full-time employees, have been included in the accompanying tabulations if they were on the pay roll with pay during the periods specified. Only the regular employees [4] of such agencies as the Work Projects Administration, National Youth Administration, and the Civilian Conservation Corps have been included. "Dollar-a-year" men and employees who receive no compensation [5] have not been included.

Employment and pay-roll data for all workers in the executive branch, except force-account workers, were obtained from the monthly reports submitted by the various departments and independent agencies to the Civil Service Commission. Similar information for force-account employees and for the personnel of the legislative, judicial, and military branches of the Federal Government was obtained from monthly reports made by the departments and agencies to the Bureau of Labor Statistics.

The pay-roll figures represent the total wage and salary expenditures of the various agencies and departments during the entire month of December in both years. The employment figures, on the other hand,

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[2] The first article, "Occupations and Salaries in Federal Employment," appeared in the January 1941 issue of the Monthly Labor Review.

[3] The information for December 1939 represents the results of numerous revisions as more complete reports have been received. It may, therefore, be regarded as less subject to change than that for December 1940, for which final figures were not available in all instances when these tabulations were made.

[4] For example, enrolled personnel of the Civilian Conservation Corps and work relief personnel of the National Youth Administration and Work Projects Administration have not been included.

[5] This group comprises employees who are empowered to exercise certain authority or who possess certain privileges as representatives of the Federal Government, although they receive no salary

show the number of employees on the pay roll with pay during a single pay period of the month. For practically all employees the figures are for the last pay period in the month, but for some of the force-account employees the reports are as of the middle of the month.

In reporting employment and pay-roll information the departments and agencies observe the following definitions and distinctions:

Full-time employees are those who are normally expected to work the full number of hours as specified in the regulations of each department or agency. This group includes temporary employees who are appointed for periods of limited duration (usually not to exceed 6 months) as well as permanent employees.

Part-time employees are those who are hired to work less than the full number of hours specified for the department or agency. They may have either temporary or permanent appointments.

Force-account employees are those engaged for a specific construction, repair, or maintenance job which a government agency does itself. Practically all of these workers are paid on a per diem or per hour basis and a large part of them are temporary employees.

The classification of Federal employees according to broad fields of activity has been made to conform as closely as practicable with a functional analysis of employment and pay rolls of State and local governments for the decade, 1929 through 1938, which has resulted from the State, County, and Municipal Survey conducted by the Bureau of Labor Statistics in cooperation with the Work Projects Administration. The functional grouping in that survey follows in its main outlines the standard classification used by the Bureau of the Census in its publications on financial statistics of States and cities. Current information similar to that made available by the survey for the 10 years ending with 1938 is being released by the Bureau of the Census in its series of publications entitled "State and Local Government, Quarterly Employment Survey." The accompanying tabulations have, therefore, been designed to present an analysis of the functions of the Federal Government in terms of employment and pay rolls which could be regarded as reasonably comparable to such information as is already available for State and local governments.

The summary character of the reports submitted by the departments and agencies each month to the Civil Service Commission and Bureau of Labor Statistics has imposed definite limitations on the preciseness of the functional distribution. Since this distribution is a byproduct of reports which are collected primarily to provide a count of personnel and a total of pay rolls in the Federal Government each month, it is in terms of the organizational unit for which the department or agency reports employment or pay rolls. In some instances, where the unit is engaged in more than one activity, it was necessary to allocate the entire unit arbitrarily to a single category in the distribution. For example, the Children's Bureau of the Department of Labor, which engages in both health and welfare activities, was classi-

fied under "welfare," since that is the broader term and could be interpreted to include health activities. Similarly, the Veterans' Administration was classified under national defense, although some of its activities might more properly be classified under welfare or health. The argument in favor of placing the Veterans' Administration under national defense was that the services of this agency are restricted to persons who can demonstrate some military connection.

Major Functional Groups

The Federal Government during 1940 increased its personnel—both civil and military—by almost 661,000, or at the rate of 55,000 persons per month. This resulted in a rise in the monthly pay rolls of more than $58,000,000. Thus, the total personnel of 2,078,500 at the end of 1940 was almost 47 percent higher than it was at the close of 1939. Salaries and wages of $242,182,000 in December 1940, however, were not quite a third higher than the monthly total at the end of 1939.

These large increases over a comparatively short period raise several questions. Has there been a general and even expansion of Federal activities or has expansion been largely concentrated in one or two phases of the governmental work? Have any governmental activities been carried on with less personnel in 1940 than in 1939? Since there has been no general reduction in rates of pay during this period, what is the explanation of the disproportionate increase in employment and pay rolls?

National defense accounted for almost 628,000 of the net increase of 661,000 persons in Federal employment between December of 1939 and 1940. Thus, at the end of 1940 almost three-fifths of all Federal personnel shown in table 1 were directly connected with defense activities, as compared with only a little more than two-fifths of the total at the close of 1939. Approximately three-quarters of the added personnel for national defense was in the armed services and the remainder was in civilian employments such as at navy yards and arsenals.

The Postal Service was second only to national defense activities in terms of both the total number of employees and the absolute increase in personnel during 1940. Although there were nearly 17,000 more postal employees in December 1940 than in the previous December, this service declined in relative importance during this period. It accounted for only 17 percent of all Federal employees in December 1940 as contrasted with 24 percent in the same months of 1939. It should be pointed out, however, that these percentages based on December figures somewhat overemphasize the relative size of the Post Office force in both years, since the number of such workers

reaches its seasonal peak every year during the Christmas holiday rush.

The largest proportionate increase in personnel shown in table 1 was in general information and research services, which had a gain in employees of 145 percent during 1940. This was one of the smaller functional units, however, and the net addition of fewer than 8,200 workers caused the large percentage increase. Practically all of this increase was in the Bureau of the Census, which was engaged in analyzing the results of the decennial census.

Six groups of Federal activities included in table 1 showed net losses in personnel between 1939 and 1940. These declines varied from less than 0.2 percent for public works to 4.4 percent for conservation and development. Practically the entire reduction in the latter group was among the regular employees of the Forest Service in the Department of Agriculture. Most of the decrease of 4.0 percent in the category of industrial and commercial development resulted from reductions in the staff of the Home Owners' Loan Corporation, which were occasioned by the declining work load attendant upon the normal process of liquidation.

In absolute numbers, the largest reduction in personnel was in welfare activities, which had a net loss of approximately 3,000 employees between December 1939 and December 1940. The number of persons employed by the Work Projects Administration alone was reduced by more than 5,000, but this reduction was partially compensated for by increases in such other welfare agencies as the Farm Security Administration and the National Youth Administration.

The expansion of national-defense activities largely explains the disproportionate increases in Federal employment and pay rolls during the 12 months of 1940. If the number of persons in the armed services and the corresponding pay rolls are deducted from the totals shown in table 1, the increases for the remaining functional divisions are approximately 20 percent for both pay rolls and employment, instead of 32 and 47 percent, respectively, for all Federal personnel. In other words, for the civilian employees as a whole, the expansion in employment and pay rolls has been almost parallel. In any comparison of salaries of military and civilian personnel, the perquisites of the armed forces must be kept in mind. If the value of food, clothing, quarters, medical care, and other items supplied to the military personnel were added to their salaries, the spread between civilian and military salaries would be reduced.

Among the civilian employees the greatest variation between the increases in employment and pay rolls was in the group engaged in other public service enterprises. The monthly pay roll for these workers was almost 42 percent higher in December 1940 than in December 1939, although there had been an increase of only about

6 percent in the number of employees. Changes in regular establishment personnel (i. e., exclusive of force-account employees) at the Panama Canal largely accounted for this variation. Two pay rolls are maintained for Federal employees in the Canal Zone: The "gold roll" which includes administrative, technical, and clerical employees who receive a bonus of 25 percent above the basic salary for working in the Canal Zone; the "silver roll" which includes common laborers and custodial employees.[6] The types of workers required for the enlargement of locks and other construction projects in the Canal Zone resulted in a change in the ratio of "gold roll" to total employees from 28 percent in December 1939 to 48 percent in December 1940. Because of these changes in the proportions of the two types of employees, there was a net decrease of almost 8 percent in regular establishment employees in the Canal Zone at the same time that there was a 50-percent net increase in the pay rolls.

Although employees in general information and research services increased 145 percent between the two Decembers, monthly pay rolls for this group rose less than 116 percent. The most important factor in this change in relationships was the hiring of large numbers of comparatively low-salaried clerical employees to work on the Census.

There was a noticeable disparity in changes in employment and pay rolls for public works between 1939 and 1940, also. Both were lower at the end of 1940 than in December 1939, but a decrease of less than 0.2 percent in employment was accompanied by a drop of almost 9 percent in pay rolls. Since this group includes all force-account employees in the Federal service, such a difference is not unusual. As these workers are hired on a per-hour or per-diem basis, there is more opportunity for divergence in movements of employment and pay rolls for this group than is the case with regular establishment employees whose employment is more continuous. For example, there were over four times as many force-account employees reported at the Panama Canal in December 1940 as in the same month of 1939, but total pay rolls in 1940 were only a little more than twice as high as they were in December 1939. Figures on man-hours, which the Bureau of Labor Statistics also collects, reveal that the average man-hours per force-account employee at the Panama Canal were only about half as great in December 1940 as in December 1939.

Differences in the changes in employment and pay rolls in the remaining functional divisions were comparatively minor. Such

[6] This distinction originated from the types of coin with which the different groups of workers were paid. Although the distinction is no longer observed in the method of payment, it is currently used as a rough occupational designation.

variations may result from changes in the proportions of lower-paid to higher-paid workers or from the effects which sharp changes in the number of employees within the month have on the comparison, since the pay-roll figures are for the entire month and employment figures are for one pay period in the month.

TABLE 1.—*Personnel and Pay Rolls in Civilian and Military Services of Federal Government, by Major Function, December 1939 and December 1940*

Major functional group	Number of persons			Monthly pay rolls		
	December 1940	December 1939	Percent of change, December 1939 to December 1940	December 1940	December 1939	Percent of change, December 1939 to December 1940
All groups—						
Excluding national defense	836,492	803,163	+4.15	$134,028,514	$127,768,367	+4.90
Including national defense	2,078,509	1,417,545	+46.63	242,182,190	183,990,231	+31.63
General government	96,309	90,489	+6.43	17,227,798	16,201,708	+6.33
Law enforcement	16,872	13,955	+20.90	2,751,496	2,238,220	+22.93
Public works	88,446	88,577	−.15	9,809,388	10,727,578	−8.56
Conservation and development	22,671	23,724	−4.44	3,569,666	3,660,216	−2.47
Agriculture	41,548	42,373	−1.95	6,858,236	6,804,166	+.79
Industrial and commercial development	23,846	24,586	−3.01	4,288,576	4,336,476	−1.10
Regulation (business and finance)	22,336	20,044	+11.43	4,540,542	4,154,452	+9.29
Labor and industrial relations	4,671	3,954	+18.13	878,778	749,908	+17.18
Health	10,584	9,722	+8.87	1,493,674	1,383,049	+8.00
Welfare	99,191	102,200	−2.94	13,827,216	13,765,479	+.45
Indian affairs	11,098	11,228	−1.16	1,377,424	1,380,952	−.26
Postal Service	362,457	345,551	+4.89	61,851,194	58,820,958	+5.15
Other public service enterprises	19,769	18,591	+6.34	3,203,278	2,262,499	+41.58
General information and research	13,848	5,660	+144.66	1,920,137	890,826	+115.55
Education and reference	2,846	2,509	+13.43	431,111	391,880	+10.01
National defense	1,242,017	614,382	+102.16	108,153,676	56,221,864	+92.37
Armed services	884,094	421,806	+109.60	56,586,999	29,806,783	+89.85
Civilian employments	357,923	192,576	+85.86	51,566,677	26,415,081	+95.22

Detailed Functional Distribution

The preceding analysis of the major classes of services performed by Federal workers represents a summary of similar information for 241 units shown in table 2. To present as much information as possible in the tabular arrangement, a dual system of abbreviation has been used which is described briefly.

In cases where a functional unit in table 2 is a part of a larger department or agency, the appropriate agency or department is indicated by the abbreviation following the name of the unit. For example, the fact that the executive staff and the maintenance force of the White House, as well as the Bureau of the Budget, are three of several parts of the Executive Office of the President is indicated by the abbreviation E.O. Other abbreviations are explained at the end of table 2. The absence of such an abbreviation indicates that the unit is an independent agency.

Some units appear under two different subdivisions in table 2. This occurs wherever a unit has force-account as well as regular establishment employees. The regular establishment employees, indicated by the abbreviation RE, are classified according to the primary function of the unit; the force-account employees, indicated by FA, are all tabulated under public works, since by definition force-account employees are those engaged in construction and maintenance work. For example, the designations (RE) (I) following Division of Territorial and Island Possessions, indicate that these are the regular establishment employees only in this division which is in the Department of Interior. The remainder of its employees have been classified under public works.

The classification in table 2 shows the complexity and variety of the services rendered by the Federal Government. It also indicates fluctuations in governmental organization: new units were created, others were consolidated or abolished, and still others were transferred from one agency or department to another during 1940. For example, as a result of defense needs, the distribution for December 1940 included 945 employees of the Advisory Commission to the Council of National Defense and 15,092 employees of the Selective Service System; neither of these units had a counterpart in the 1939 distribution. The transfer of the Weather Bureau from the Department of Agriculture to the Department of Commerce was a result of the President's Reorganization Plan No. IV. Numerous other such transfers have been noted in table 2.

The major changes in the utilization of Government personnel during 1940 have already been observed. National-defense activities have been paramount and their influence is not limited to the category "national defense." Numerous governmental units were designated as defense agencies in the latter half of 1940 and some of them have increased their staffs substantially as a result of the additional duties entailed by their defense status. For example, the employment and pay rolls of the Civil Service Commission, which is responsible for recruiting civilian workers for the defense program, were more than doubled between December 1939 and December 1940. The Immigration and Naturalization Service, the Civil Aeronautics Administration, and the Maritime Commission are other examples of defense agencies which have had substantial increases in their staffs.

Although emergency activities in conjunction with the defense program have in recent months overshadowed other changes in Government functions, the fluctuations in nondefense programs are also revealed in the details in table 2. During 1940 there was a sharp reduction in the employment and pay rolls of the Public Works Administration—the funds appropriated for carrying out the purposes of this Administration have been nearly exhausted. On the other hand,

the intensification of activity in carrying out the purposes of the Fair Labor Standards Act is evident from the rise in employment and pay rolls of the Wage and Hour Division of the Department of Labor between December 1939 and December 1940.

TABLE 2.—*Detailed Functional Classification of Personnel and Pay Rolls in Civilian and Military Services of Federal Government, December 1939 and December 1940*

[For abbreviations, see note on p. 1374]

Functional group	Number of persons		Monthly pay rolls	
	December 1940	December 1939	December 1940	December 1939
General Government				
Total, general government	96,309	90,489	$17,227,798	$16,201,708
Legislative	3,672	3,241	1,015,462	957,543
House of Representatives	2,314	2,016	706,221	663,360
Senate	1,329	1,184	302,502	284,398
Temporary National Economic Committee	29	41	6,739	9,785
Judicial	2,528	2,268	616,981	550,008
Executive units, not elsewhere classified	236	189	30,785	30,633
Executive staff of White House (E.O.)	50	48	21,101	19,875
Maintenance force of White House (E.O.)	186	141	9,684	10,758
International relations	5,993	5,829	1,131,342	1,091,623
Department of State [1]	5,932	5,764	1,115,772	1,074,395
Alien Property Custodian's Office (J)	61	65	15,570	17,228
Territorial and insular relations	348	347	41,935	45,322
Governor of Alaska (I)	13	7	2,255	2,160
Equatorial Islands (I)	17	22	1,623	1,706
Governor of Hawaii (I)	4	4	1,368	1,638
High Commissioner, Philippine Islands (I)	100	96	9,980	14,978
Division of Territorial and Island Possessions (RE) (I)	87	62	13,426	9,499
Governor of the Virgin Islands (RE) (I)	127	156	13,283	15,341
Personnel recruitment: Civil Service Commission	3,980	1,829	607,642	296,261
Finance and budgeting	51,140	49,599	9,210,121	8,903,298
Administration and budgeting	2,662	3,086	446,180	487,323
Bureau of the Budget (E.O.)	235	162	66,709	44,506
Division of Appointments (T) [2]		20		3,469
Division of Personnel (T) [2]	59		10,466	
Office of the Chief Clerk (T)	1,614	2,167	252,768	327,168
Office of the General Counsel (T)	41	40	12,182	10,866
Division of Printing (T)	34	32	5,658	5,363
Division of Research and Statistics (T)	65	66	14,226	13,647
Office of the Secretary (T)	80	64	21,272	19,296
Office of the Secretary—Expense of Loans (T)	40	41	8,581	10,000
Superintendent of Treasury Buildings (T)	267	257	29,694	26,278
Superintendent of Treasury Buildings—Guard Force (T)	227	237	24,624	26,730
Revenues	34,469	32,955	6,610,154	6,358,788
Board of Tax Appeals	132	128	39,598	38,388
Bond and Spirits Division (J) [3]	66	73	15,251	16,525
Bureau of Customs (T)	8,864	8,921	1,655,362	1,657,386
Bureau of Internal Revenue (T)	25,407	23,833	4,899,943	4,646,489
Custody and disbursement of funds	5,123	4,339	750,497	627,429
Division of Disbursement (T)	[4] 2,062	2,045	[4] 275,569	278,183
Bureau of the Mint (T)	1,946	1,287	318,481	206,209
Office of the Treasurer (T)	1,115	1,007	156,447	143,037
Auditing and accounting	6,711	7,034	1,095,584	1,126,661
General Accounting Office	5,273	5,109	878,013	851,660
Commissioner of Accounts and Deposits (T) [5]	[4] 1,438	1,925	[4] 217,571	275,001
Public debt	2,175	2,185	307,706	303,097
Government Mill (T)	19	19	2,224	2,215
Division of Loans and Currency (T)	1,361	1,361	192,714	190,309
Division of Paper Custody (T)	26	27	3,682	3,801
Commissioner of the Public Debt (T)	40	37	8,373	7,592

See footnotes at end of table.

TABLE 2.—*Detailed Functional Classification of Personnel and Pay Rolls in Civilian and Military Services of Federal Government, December 1939 and December 1940*—Continued

Functional group	Number of persons		Monthly pay rolls	
	December 1940	December 1939	December 1940	December 1939
General Government—Continued				
Finance and budgeting—Continued.				
Public debt—Continued.				
Division of Public Debt Accounts and Audit (T)	150	151	$24,229	$23,621
Office of the Register of the Treasury (T)	376	386	51,406	51,911
Division of Savings Bonds (T)	203	204	25,078	23,648
Purchasing and supplies	14,901	14,257	2,504,428	2,294,906
Government Printing Office	6,944	5,874	1,291,160	1,070,052
Bureau of Engraving and Printing (T)	5,688	5,648	903,668	857,082
Procurement Division, Branch of Supply (T)	661	679	98,602	99,406
Procurement Division, Field Administrative Section (T)	1,608	2,056	210,998	268,366
Legal services	2,892	2,910	679,919	683,379
Special Counsel for the United States	3	4	1,683	1,808
Administrative Division (J)	401	367	58,672	55,473
Antitrust Division (J)	371	[6] 406	95,266	[6] 102,568
Assistant to the Attorney General (J)	57	46	14,963	11,210
Assistant Solicitor General (J)	15	16	5,565	5,053
Attorney General (J)	20	18	7,708	6,437
Claims Division (J)	131	118	35,349	36,040
Customs Division (J)	33	36	9,625	10,407
Examination of Judicial Offices (J)	16	16	3,896	4,000
Lands Division (J)	471	512	115,321	119,131
Miscellaneous Unit (J)	5	2	2,358	400
Solicitor General (J)	21	22	6,395	6,826
Tax Division (J)	172	174	49,087	50,215
United States Attorneys (J)	1,056	1,022	244,940	237,100
Veterans Insurance Litigation Division (J)	120	151	29,091	36,711
Recording and reporting: National Archives	380	353	68,647	64,394
General care of Government buildings	10,239	9,667	1,320,536	1,284,341
Architect of the Capitol (Leg.)	961	1,108	110,386	131,812
Public Buildings Administration (FWA)	9,278	8,559	1,210,150	1,152,529
Law Enforcement				
Total, law enforcement	16,872	13,955	2,751,496	2,238,220
Coast Guard (civilian employees) (RE) (T)	4,978	5,737	595,241	648,742
Criminal Division (J)	100	95	30,859	29,972
Federal Bureau of Investigation (J)	4,211	2,418	802,804	497,182
Immigration and Naturalization Service (L) (J) [7]	5,755	3,974	963,952	718,520
Bureau of Narcotics (T)	350	358	77,147	78,331
Secret Service (T)	410	341	85,855	75,900
United States Marshals (J)	1,068	1,032	195,638	189,573
Public Works				
Total, public works	88,446	88,577	9,809,388	10,727,578
Administration and engineering	1,571	6,247	319,357	1,320,568
Federal Works Agency—Office of Administrator (FWA)	137	53	29,102	14,460
Public Works Administration (FWA)	1,434	6,194	290,255	1,306,108
Highways	3,402	2,949	597,165	529,754
Alaska Road Commission (I)	343	105	71,577	25,796
Public Roads Administration (FWA)	3,059	2,844	525,588	503,958
Public (construction) projects [8]	2,283	6,177	147,928	396,987
Bureau of Biological Survey (FA) (I) [9]	----	1	----	150
Coast Guard (FA) (T)	102	130	10,205	8,455
Fish and Wildlife Service (FA) (I) [9]	11	----	1,361	----
Bureau of Fisheries (FA) (I) [9]	----	42	----	2,697
Forest Service (FA) (A)	20	65	1,442	3,438
General Land Office (FA) (I)	0	22	0	3,172
Geological Survey (FA) (I)	330	1,033	15,256	76,374
Grazing Service (FA) (I)	29	34	1,751	2,936
Office of Indian Affairs (FA) (I) [10]	1,222	2,566	77,556	145,147
Bureau of Mines (FA) (I)	0	18	0	1,818
National Agricultural Research Center (FA) (A) [11]	350	226	24,433	23,950
National Park Service (FA) (I)	82	411	5,051	21,477

See footnotes at end of table.

TABLE 2.—*Detailed Functional Classification of Personnel and Pay Rolls in Civilian and Military Services of Federal Government, December 1939 and December 1940*—Continued

Functional group	Number of persons		Monthly pay rolls	
	December 1940	December 1939	December 1940	December 1939
Public Works—Continued				
Public (construction) projects—Continued.				
Soil Conservation Service (FA) (A)	119	1,476	$10,394	$104,372
Division of Territorial and Island Possessions (FA) (I)	18	0	479	0
Governor of the Virgin Islands (FA) (I)	0	153	0	3,001
Housing projects	1,805	2,131	410,485	458,313
Alley Dwelling Authority	127	44	19,998	8,577
United States Housing Authority (FWA)	1,678	2,087	390,487	449,736
Waterways and flood control	49,508	55,574	5,807,145	6,297,936
Coast and Geodetic Survey (FA) (C)	0	9	0	1,706
Corps of Engineers (W)	46,160	52,042	5,368,238	5,842,373
International Boundary Commission, United States and Mexico (FA) (S)	506	485	43,897	44,631
Bureau of Reclamation (FA) (I)	2,842	3,038	395,010	409,226
Airports	797	717	56,083	70,338
Civil Aeronautics Authority (FA) (C) [12]	781	710	54,678	70,027
National Advisory Committee for Aeronautics (FA)	16	7	1,405	311
Public-service enterprises	29,080	14,782	2,471,225	1,653,682
Alaska Railroad Commission (FA) (I)	0	95	0	13,088
Bonneville Project (FA) (I) [13]	0	289	0	27,461
Panama Canal (FA)	14,776	3,414	515,599	220,298
Tennessee Valley Authority (FA)	14,304	10,984	1,955,626	1,392,835
Conservation and Development				
Total, conservation and development	22,671	23,724	3,569,666	3,660,216
Administration	638	625	127,219	123,377
Division of Investigations (I)	126	153	28,269	34,761
Office of the Secretary (I)	413	384	72,590	64,995
Office of the Solicitor (I)	99	88	26,360	23,621
Planning boards and commission	29	31	6,917	7,122
Commission of Fine Arts (I)	3	3	540	540
National Capital Park and Planning Commission	26	28	6,377	6,582
Natural resources	12,570	15,079	2,050,895	2,266,533
Bureau of Biological Survey (RE) (I) [9]	----------	1,112	----------	179,798
Bureau of Fisheries (RE) (I) [9]	----------	896	----------	97,036
Fish and Wildlife Service (RE) (I) [9]	2,451	----------	322,594	----------
Forest Service (RE) (A)	6,978	10,134	1,220,338	1,494,393
General Land Office (RE) (I)	717	723	134,165	131,646
National Park Service (RE) (I)	2,424	2,214	373,798	363,660
Mineral resources	4,254	3,112	562,055	469,268
Bureau of Mines (RE) (I)	1,182	1,017	202,498	181,964
Geological Survey (RE) (I)	3,069	2,092	358,640	286,387
War Minerals Relief Commission (I)	3	3	917	917
Drainage and reclamation: Bureau of Reclamation (RE) (I)	5,180	4,877	822,580	793,916
Agriculture				
Total, agriculture	41,548	42,373	6,858,236	6,804,166
Administration	1,525	1,544	307,991	304,159
Foreign Agricultural Relations (A)	95	71	21,345	15,943
Office of Information (A)	204	207	36,789	37,172
Library (A)	36	35	6,146	6,264
Office of the Secretary (A)	654	651	125,903	120,313
Office of the Solicitor (A)	536	580	117,808	124,467
Farm operations and management	3,019	2,661	490,799	470,734
Bureau of Entomology and Plant Quarantine (A)	2,673	2,313	425,228	405,622
Extension Service (A)	346	348	65,571	65,112

See footnotes at end of table.

TABLE 2.—*Detailed Functional Classification of Personnel and Pay Rolls in Civilian and Military Services of Federal Government, December 1939 and December 1940*—Continued

Functional group	Number of persons		Monthly pay rolls	
	December 1940	December 1939	December 1940	December 1939
Agriculture—Continued				
Soil conservation and improvement	8,653	11,008	$1,504,837	$1,753,192
Grazing Service (RE) (I)	419	211	63,294	37,577
Soil Conservation Service (RE) (A)	8,234	10,797	1,441,543	1,715,615
Marketing and crop control	19,373	18,361	3,054,573	2,789,368
Agricultural Adjustment Administration (A) [14]	7,224	8,363	935,453	1,089,922
Bureau of Agricultural Economics (A)	1,668	1,576	314,219	277,734
Agricultural Marketing Service (A)	3,433	2,604	609,748	494,916
Commodity Credit Corporation (A)	262	144	48,993	24,509
Farm Credit Administration (A)	2,933	3,171	554,016	590,547
Federal Crop Insurance Corporation (A)	508	629	83,354	92,255
Federal Surplus Commodities Corporation (A) [15]		1,286		140,313
Northeastern Timber Salvage Administration (A)	188	540	27,808	68,697
Sugar Division (A) [16]		48		10,475
Surplus Marketing Administration (A) [15]	3,157		480,982	
Agricultural research	8,978	8,799	1,500,036	1,486,713
Bureau of Agricultural Chemistry and Engineering (A)	826	709	158,269	152,747
Bureau of Animal Industry (A)	5,373	5,416	879,015	882,828
National Agricultural Research Center (RE) (A) [11]	156	258	19,363	32,237
Bureau of Dairy Industry (A)	275	257	47,155	45,495
Experiment Stations (A)	126	109	20,944	19,074
Bureau of Plant Industry (A)	2,222	2,050	375,290	354,332
Industrial and Commercial Development				
Total, industrial and commercial development	23,846	24,586	4,288,576	4,336,476
General promotion and research	1,071	1,199	209,247	228,908
Office of the Secretary (C) [16]	228	212	43,497	47,045
Bureau of Foreign and Domestic Commerce (C)	767	898	151,226	164,982
Fairs and memorial commissions	76	89	14,524	16,881
Golden Gate International Exposition Commission	12	25	2,940	4,776
Mount Rushmore National Memorial Commission	38	47	4,972	7,578
New York World's Fair Commission	24	14	6,210	3,909
Thomas Jefferson Memorial Commission (I)	2	3	402	618
Aid to business and public	22,775	23,387	4,079,329	4,107,568
Coast and Geodetic Survey (RE) (C)	1,390	1,186	244,098	213,166
Electric Home and Farm Authority (FLA)	173	154	31,084	26,808
Export-Import Bank (FLA)	25	17	6,533	4,815
Federal Housing Administration (FLA)	4,887	4,811	879,016	871,807
Federal Loan Agency Administrator (FLA) [16]	0	1	556	1,000
Home Owners' Loan Corporation (FLA)	8,489	10,363	1,394,256	1,639,724
National Advisory Committee for Aeronautics (RE)	1,057	708	177,395	122,665
Reconstruction Finance Corporation (FLA)	4,471	4,131	862,772	798,406
Rural Electrification Administration (A)	979	774	197,597	153,641
Bureau of Standards (C)	1,014	939	212,796	201,128
Tariff Commission	290	303	73,226	74,408
Regulation				
Total, regulation	22,336	20,044	4,540,542	4,154,452
Financial institutions and corporations	5,321	5,039	1,139,964	1,102,086
Comptroller of the Currency (T)	119	114	20,312	20,007
Comptroller of the Currency, National Bank Examiners Fund (T)	850	849	206,591	201,107
Commodity Exchange Administration (A)	188	221	37,726	43,493
Federal Deposit Insurance Corporation	1,677	1,388	297,001	266,830
Federal Home Loan Bank Board (FLA)	383	378	84,213	83,194
Board of Governors, Federal Reserve System	449	434	110,555	104,339
Federal Savings and Loan Insurance Corporation (FLA)	44	39	10,315	9,700
Securities and Exchange Commission	1,611	1,616	373,251	373,416
Public utilities, industries, and trades	17,015	15,005	3,400,578	3,052,366
Bituminous Coal Division (I)	925	987	171,272	181,147
Civil Aeronautics Authority (RE) (C) [17]	5,325	4,203	878,523	715,004
Civil Aeronautics Board (C) [17]	303		73,208	

See footnotes at end of table.

TABLE 2.—*Detailed Functional Classification of Personnel and Pay Rolls in Civilian and Military Services of Federal Government, December 1939 and December 1940*—Continued

Functional group	Number of persons		Monthly pay rolls	
	December 1940	December 1939	December 1940	December 1939
Regulation—Continued				
Public utilities, industries, and trades—Continued.				
Consumers' Counsel (I)	55	58	$12,924	$15,541
Federal Alcohol Administration (T) [17]		159		31,168
Federal Communications Commission	1,088	624	220,941	135,187
Federal Power Commission	743	790	168,201	179,788
Federal Trade Commission	650	660	161,634	163,261
Food and Drug Administration (A) (FSA) [18]	867	919	176,311	189,887
Interstate Commerce Commission	2,729	2,661	625,060	610,627
National Inventors Council (C) [19]	20		3,127	
Patent Office (C)	1,345	1,353	304,091	294,766
Petroleum Conservation Service (I)	80	90	17,710	19,431
Bureau of Marine Inspection and Navigation (C)	1,032	920	216,278	203,332
Maritime Commission	1,853	1,581	371,298	313,227
Labor and Industrial Relations				
Total, labor and industrial relations	4,671	3,954	878,778	749,908
Administration and research	891	890	151,758	146,721
International Labor Office (L)	4	5	1,878	1,105
Bureau of Labor Statistics (L)	709	699	115,079	109,530
Office of the Secretary (L) [20]	152	186	28,491	36,086
Office of the Solicitor (L) [20]	26		6,310	
Working conditions	2,266	1,472	418,779	282,685
Division of Labor Standards (L)	146	76	33,035	18,011
Division of Public Contracts (L)	134	130	25,258	25,207
Wage and Hour Division (L)	1,927	1,157	348,334	220,771
Women's Bureau (L)	59	109	12,152	18,696
Employee-employer relations	991	1,072	220,740	235,743
Conciliation Service (L)	122	91	31,865	24,173
Maritime Labor Board	34	34	9,008	9,291
National Labor Relations Board	763	874	161,446	183,956
National Mediation Board	72	73	18,421	18,323
Compensation and insurance for injuries: Employees' Compensation Commission	523	520	87,501	84,759
Health				
Total, health	10,584	9,722	1,493,674	1,383,049
Public health—general: Public Health Service (FSA)	8,330	7,553	1,221,208	1,124,513
Hospitals	2,254	2,169	272,466	258,536
Freedmen's Hospital (FSA) (I) [18]	344	333	33,139	30,981
St. Elizabeth's Hospital (FSA) (I) [18]	1,910	1,836	239,327	227,555
Welfare				
Total, welfare	99,191	102,200	13,827,216	13,765,479
Public assistance and work programs	95,193	98,714	13,180,663	13,208,855
Direct relief and security programs	35,525	31,987	4,567,577	4,027,554
Children's Bureau (L)	374	371	76,229	70,391
Farm Security Administration (A)	20,116	18,325	2,292,128	1,982,909
Federal Security Agency—Office of Administrator (FSA)	598	30	112,021	11,112
Railroad Retirement Board [21]	2,248	2,352	354,174	373,774
Social Security Board (FSA) [21]	12,189	10,909	1,733,025	1,589,368
Work programs	59,668	66,727	8,613,086	9,181,301
Civilian Conservation Corps (A, FSA, I, W)	34,306	36,764	5,088,218	5,276,526
National Youth Administration (FSA)	3,005	1,976	432,932	298,092
Puerto Rico Reconstruction Administration (I)	548	1,021	64,368	119,694
Work Projects Administration (FWA)	21,809	26,966	3,027,568	3,486,989
Correctional	3,998	3,486	646,553	556,624
National Training School for Boys (J)	120	103	15,117	11,897
Office of Pardon Attorney (J)	9	9	2,200	2,200
Penal Institutions (J)	3,071	2,600	487,680	405,253
Bureau of Prisons (J)	117	114	24,984	24,508
Prisons Industries Fund (J)	214	210	40,748	38,635
Probation System (J) (Jud.) [22]	379	346	64,380	58,620
Support of Prisoners, Alaska (J)	88	104	11,444	15,511

See footnotes at end of table.

TABLE 2.—*Detailed Functional Classification of Personnel and Pay Rolls in Civilian and Military Services of Federal Government, December 1939 and December 1940*—Continued

Functional group	Number of persons		Monthly pay rolls	
	December 1940	December 1939	December 1940	December 1939
Indian Affairs				
Total, Indian affairs	11,098	11,228	$1,377,424	$1,380,952
Office of Indian Affairs (RE) (I) [10]	11,098	11,219	1,377,424	1,378,849
Indian Arts and Crafts Board (I) [10]	----------	9	----------	2,103
Postal Service				
Total, Postal Service	362,457	245,551	61,851,194	58,820,958
Other Public Services				
Total, other public-service enterprises	19,769	18,591	3,203,278	2,262,499
Gas and electric systems	6,774	4,755	1,133,031	853,162
Bonneville project (RE) (I) [13]	2,758	1,142	405,970	189,757
Tennessee Valley Authority (RE)	4,016	3,613	727,061	663,405
Transportation	12,995	13,836	2,070,247	1,409,337
Alaska Railroad Commission (RE) (I)	790	619	165,088	131,562
Consolidated Purchasing and Shipping Unit (I)	84	81	11,695	11,965
Panama Canal (RE)	12,121	13,136	1,893,464	1,265,810
General Information and Research				
Total, general information and research	13,848	5,660	1,920,137	890,826
Bureau of the Census (C)	10,791	3,018	1,412,442	448,032
Bureau of Home Economics (A)	138	164	24,231	26,748
National Resources Planning Board (E.O.)	277	247	58,810	51,464
Office of Government Reports (E.O.)	350	296	59,202	53,958
Weather Bureau (A) (C) [15]	2,292	1,935	365,452	310,624
Education and Reference				
Total, education and reference	2,846	2,509	431,111	391,880
Education	872	697	154,151	132,818
Administration and research: Office of Education (FSA)	390	252	91,088	69,395
Educational institutions	482	445	63,063	63,423
Columbia Institution for the Deaf (I) (FSA) [18]	113	123	10,370	10,216
Howard University (I) (FSA) [18]	369	322	52,693	53,207
Libraries and museums	1,974	1,812	276,960	259,062
Botanic Garden (Leg.)	50	49	6,732	6,445
Library of Congress (Leg.)	1,267	1,178	174,909	166,488
Smithsonian Institution	657	585	95,319	86,129
National Defense				
Total, national defense	1,242,017	614,382	108,153,676	56,221,864
Armed services	884,094	421,806	56,586,999	29,806,783
Army (W)	622,572	249,029	33,669,530	13,637,920
Navy (N)	245,185	159,831	20,670,512	14,431,961
Coast Guard (T)	16,337	12,946	2,246,957	1,736,902
Civilian employments	357,923	192,576	51,566,677	26,415,081
Offices of—	132,742	54,964	15,521,698	6,770,537
Adjutant General of the Army (W)	3,021	1,024	383,388	143,744
Chief of the Air Corps (W)	12,307	6,871	1,673,805	939,441
Army War College (W)	46	43	6,177	5,734
Chief of Cavalry (W)	12	7	1,589	1,022
Cavalry School (W)	17	12	2,033	1,702
Chief of Chaplains (W)	19	4	2,443	695
Chemical Warfare Service (W)	4,150	1,355	503,071	155,257
Chief of Coast Artillery (W)	60	35	8,270	5,485
Chief of Field Artillery (W)	21	11	2,573	1,417
Finance Department (W)	2,052	1,037	294,934	152,795
Chief of Infantry (W)	49	31	6,739	4,511
Inspector General (W)	32	15	4,666	2,800
Judge Advocate General (W)	74	55	12,523	9,838
Medical Department (W)	3,981	1,105	322,584	93,557
Military Intelligence Division (W)	----------	87	----------	10,049
National Board for the Promotion of Rifle Practice (W)	18	22	2,452	2,886
National Guard Bureau (W)	117	136	17,789	23,467
Ordnance Department (W)	42,186	20,320	5,955,272	2,832,596
Quartermaster Corps (W)	57,909	19,901	5,488,561	1,994,806
Secretary of War (W)	1,072	295	133,385	45,407
Signal Corps (W)	3,870	1,432	493,634	200,153

See footnotes at end of table.

TABLE 2.—*Detailed Functional Classification of Personnel and Pay Rolls in Civilian and Military Services of Federal Government, December 1939 and December 1940*—Continued

Functional group	Number of persons		Monthly pay rolls	
	December 1940	December 1939	December 1940	December 1939
National Defense—Continued				
National defense—Continued.				
Civilian employments—Continued.				
Offices of—Continued.				
Chief of Staff (W)	431	184	$53,558	$27,571
Surgeon General (W)	669	374	76,915	43,929
United States Military Academy (W)	629	608	75,337	71,675
Navy (N) [24]	167,724	99,024	28,818,065	14,312,222
Veterans' activities	41,420	38,588	5,640,483	5,332,322
American Battle Monuments Commission	37	92	6,465	6,713
Veterans' Administration	41,383	38,496	5,633,968	5,325,609
Council of National Defense [25]	945	----------	198,005	----------
Selective Service System [26]	15,092	----------	1,388,476	----------

NOTE: Abbreviations, in order of occurrence, used as follows:
E. O.—Executive Office; J.—Justice; I.—Interior; RE.—Regular establishment only; excludes force-account; T.—Treasury; Leg.—Legislative; FWA.—Federal Works Agency; L.—Labor; W.—War; N.—Navy; FA.—Force-account. Force-account employees are those engaged for a specific construction, repair, or maintenance job which a Government agency does itself. A large part of them are temporary employees and practically all are paid on a per diem basis; A.—Agriculture; C.—Commerce; S.—State; FSA.—Federal Security Agency; Jud.—Judicial; and FLA.—Federal Loan Agency.

[1] Excludes force-account employees of the International Boundary Commission, United States and Mexico.

[2] Effective July 1, 1940, the Division of Appointments became the Appointments and Research Section of the Division of Personnel which latter Division was organized pursuant to section 6 of Executive Order No. 7916 of June 24, 1938.

[3] The Bond and Spirits Division of the Department of Justice has supervision of civil matters arising under the National Prohibition Act and associated revenue laws. It is not an enforcement agency.

[4] These data were combined in the monthly employment and pay-roll report of the Commissioner of Accounts and Deposits and the break-down was prorated on basis of individual reports for October 1940.

[5] Pursuant to Reorganization Plan No. III, effective June 30, 1940, the Office of the Commissioner of Accounts and Deposits was succeeded by the Bureau of Accounts.

[6] Includes 15 employees with a monthly pay roll of $4,316 in the Temporary National Economic Committee Unit of the Department of Justice. This unit was abolished in March 1940.

[7] Pursuant to Reorganization Plan No. V, effective June 14, 1940, the Immigration and Naturalization Service was transferred from the Department of Labor to the Department of Justice.

[8] The Public (Construction) Projects' employees are force-account employees only. Although force-account pay rolls exclude operation employees, they include employees hired for repair work which is considered a part of maintenance and operation and which should ordinarily be included with the regular staff of the department served. However, since these employees are inseparable from the construction employees in force-account reports, they have been included here in their entirety.

[9] Pursuant to Reorganization Plan No. III, effective June 30, 1940, the Bureau of Biological Survey and the Bureau of Fisheries were consolidated into the Fish and Wildlife Service.

[10] In September 1940 the Office of Indian Affairs and the Indian Arts and Crafts Board were consolidated into the Bureau of Indian Affairs.

[11] Also known as the Beltsville Research Center.

[12] Pursuant to Reorganization Plans No. III and IV, effective June 30, 1940, the Civil Aeronautics Authority was transferred to the Department of Commerce where it became the Civil Aeronautics Administration and the Civil Aeronautics Board.

[13] Effective December 1940 the Bonneville Project was reported as the Bonneville Power Administration.

[14] Since July 1940 the employees and pay roll of the Sugar Division have been included in the figures of the Agricultural Adjustment Administration.

[15] Pursuant to Reorganization Plan No. III, effective June 30, 1940, the Division of Marketing and Marketing Agreements and the Surplus Commodities Corporation were consolidated into the Surplus Marketing Administration.

[16] Since September 1940 the Administrator of the Federal Loan Agency and ⅓ of his salary have been included in the monthly employment and pay-roll report of the Office of the Secretary of Commerce.

[17] Pursuant to Reorganization Plan No. III, effective June 30, 1940, the Federal Alcohol Administration was abolished and its duties transferred to the Bureau of Internal Revenue.

[18] Pursuant to Reorganization Plan No. IV, effective June 30, 1940, this agency was transferred to the Federal Security Agency.

[19] The National Inventors Council was established October 6, 1940.

[20] The first monthly report of the Office of the Solicitor as an individual organizational unit was received by the Civil Service Commission in October 1940. Prior to that time the employment and pay-roll data of this Office were included in the reports of the Office of the Secretary.

[21] Includes unemployment insurance and placement programs.

[22] Effective July 1, 1940, the Probation System was transferred from the Department of Justice to the Administrative Office of the United States Courts.

[23] Pursuant to Reorganization Plan No. IV, effective June 30, 1940, the Weather Bureau was transferred from the Department of Agriculture to the Department of Commerce.

[24] Civilian employments in the Navy Department were not reported in the same detail as those in the War Department.

[25] Pursuant to section 2 of the act of August 29, 1916 (39 Stat. 649), the Council of National Defense was established May 28, 1940.

[26] The Selective Service System was established pursuant to the Selective Training and Service Act of 1940, approved September 16, 1940.

Defense Activities and Conditions

LABOR REQUIREMENTS FOR SHIPBUILDING UNDER DEFENSE PROGRAM

THE largest shipbuilding program in the history of the Nation will require a very large expansion in the labor force at shipyards between February 1941 and September 1942, according to a special report issued by the Bureau of Labor Statistics. This report shows that between the dates mentioned a total of 309,000 additional shipbuilding workers will be required by the industry for new ship construction and for maintenance and repair work.

This is the second report on labor requirements for the shipbuilding industry issued by the Bureau of Labor Statistics. The first report, however, covered only the labor requirements for the Federal shipbuilding program under contract on December 31, 1940.[1] The present analysis includes the additional workers required on United States Government vessels placed under contract from January through March 1941. Furthermore, the scope of the report has been broadened to include the employment requirements for British and private vessels under construction, as well as the labor needs for maintenance and repair work. Before proceeding to a discussion of the employment figures which must be viewed in relation to place as well as time, it is necessary first to consider the shipbuilding program under way in American shipyards.

The Shipbuilding Program

At the end of March 1941, American shipyards had under way contracts totaling $5,668,000,000 for naval vessels and cargo boats. The greater part of this program consisted of $5,331,000,000 for both naval vessels and cargo boats that had been let by the United States Government to commercial shipyards or for which provision had been made for "force-account" construction in United States Navy Yards. It also included $79,000,000 for 288 small vessels, designated as "District Craft" for the United States Navy; $96,000,000 for 60 cargo boats for the British; and $162,000,000 for 204 vessels such as oil tankers and cargo boats for private companies.

[1] Monthly Labor Review, March 1941 (pp. 571-576).

This total represents merely the work which is definitely projected and for which starting and completion dates have been set. The figure does not cover the recently announced cargo-ship construction program for the British Government under provisions of the Lease-Lend Act, or the additional cargo ships which are now contemplated for the United States Maritime Commission. Most of the 400 small naval craft authorized in January 1941 had not been placed under contract by March 31, 1941, and are therefore not included; nor does the figure cover the unknown value of the ship-repair work that will have to be done in commercial shipyards and in Navy Yards.

Most of the Federal work, totaling $5,410,000,000, originated under contracts let since June 1, 1940. For shipbuilding, however, it is confusing to try to distinguish sharply between work originating before and that originating after the 1940–41 defense appropriations, which are frequently described as giving rise to the "defense program." For example, in March 1941 work was still in progress on vessels totaling $800,000,000, some of which had been started as far back as August 1937, but most of which had been laid down in 1939 and the first half of 1940. The full value of earlier contracts is included in the total of $5,410,000,000, although much of the work on these contracts has been completed. However, in making the estimates of the labor required, only that work yet to be done on these contracts has been considered.

The present analysis of labor requirements for the construction of Federal, British, and private vessels, traces, month by month, the growing demand for men for the completion of all definitely projected work, whether it be the completion of vessels started several years ago or of vessels provided for in the "two-ocean navy" authorization, and the "emergency cargo-ship construction" program. The analysis further includes the labor needs for service and repair work in private shipyards, and in United States Navy Yards.

Future Labor Requirements

Actual employment in shipyards from January 1935 to February 1941 and estimated employment from March 1941 through December 1942 are shown in table 1. It may be seen that employment in the shipbuilding industry showed a substantial gain fom January 1935 through May 1936. Over the next 2½ years shipbuilding employment showed no definite trend, although a slight expansion occurred in the first half of 1937. However, beginning in the latter part of 1938 and extending through February 1941, employment rose steadily, the rate of increase being sharper after June 1940 when the present national defense program was instituted.

Total employment in private shipyards in February 1941 is estimated at 139,400 wage earners. Of these, more than one-half were

employed on the Federal shipbuilding program, and the remainder on repairs and construction of private vessels or on foreign vessels. The United States Navy Yards were employing 112,000 workers—60,500 on new construction and 51,500 on service and repair. Thus, employment in shipyards on the construction and repair of the Federal Government, British, and private vessels totaled more than 250,000 workers in February 1941, more than twice the average number employed in 1939, and approximately 4 times the number employed in 1935.

The present schedule of ship-completion dates and the pressure of the ship-repair program will require a continued increase in the number of workers to be hired until the peak employment is reached in September 1942, when a total of more than 560,000 shipyard workers will be required by the industry. In other words, employment between February 1941 and September 1942 will have to more than double in order to execute the present schedule of operations.

TABLE 1.—*Employment in Shipyards on Construction and Repair of Vessels, January 1935 to February 1941, and Estimate to December 1942*

Month	1935	1936	1937	1938	1939	1940	1941	1942
January	59,441	75,394	90,413	92,777	96,738	132,607	238,330	[1] 506,200
February	62,478	75,951	92,838	89,488	100,491	136,802	251,388	[1] 513,900
March	62,875	82,390	98,642	88,900	103,547	143,544	[1] 274,200	[1] 521,100
April	63,134	90,126	99,292	86,792	108,299	145,901	[1] 291,500	[1] 534,900
May	63,316	92,718	101,117	89,001	111,628	151,402	[1] 319,200	[1] 544,600
June	59,151	83,585	97,402	89,506	115,539	159,440	[1] 345,100	[1] 553,100
July	64,702	90,919	93,555	88,948	113,744	167,274	[1] 375,000	[1] 555,600
August	63,551	92,125	94,582	87,203	114,394	179,572	[1] 396,700	[1] 558,200
September	65,336	94,113	97,900	87,069	121,567	189,491	[1] 424,800	[1] 560,500
October	68,739	93,876	97,922	89,392	125,539	203,696	[1] 453,800	[1] 552,300
November	70,542	91,664	96,907	93,413	126,519	217,344	[1] 473,000	[1] 541,500
December	71,908	87,171	96,155	95,933	132,026	227,574	[1] 495,800	[1] 530,800

[1] Estimated.

The estimates of future labor requirements are based primarily on patterns of employment on ship construction developed by the Bureau of Labor Statistics from reports received on previous Federal ship contracts. Each month reports were received from individual shipyards, giving the monthly man-hours worked in the building of individual ships. From these data were derived the total man-hours required to complete the various types of vessels included in the present program. From these figures monthly estimates have been computed to accord with the time periods called for in the present contracts. The monthly estimates of workers required were obtained by translating the number of man-hours needed to complete the program according to schedule into the number of workers necessary to deliver those man-hours each month. In making this translation it was assumed that each worker put in 195 hours per month. This is the present average length of the work-month in private shipyards and United States Navy Yards.

Private shipyards will require a greater number of workers under this program than will the Federal yards. These private yards, which are handling a much greater volume of the new vessels, and are expanding shipyard facilities rapidly, will require 406,000 employees by September 1942. The increase in employment in United States Navy Yards is much smaller than that in private shipyards. Peak employment in the Navy Yards on new vessels is estimated at 84,000 workers by September 1942, while maintenance and repair work will require an additional 72,000 workers by December 1942, when peak employment on this type of work should be reached.

Total employment on the construction and repair of vessels in shipyards is estimated to increase from 251,000 workers in February 1941 to 560,000 by September 1942. This means that over this period there will be required a net addition to the labor force of 309,000 workers. The estimates indicate that 244,000 new workers will be needed by the end of 1941, and another 65,000 workers will have to be hired from January to September 1942.

Hours of Overtime Worked and Number of Shifts in the Shipbuilding Industry

Both the hours of overtime worked in shipyards and the number of shifts employed in the operation of shipyards have been taken into account in making the estimates of the labor requirements presented above. It should be remembered, however, that any substantial increase in the current number of hours of overtime worked would decrease the number of workers required. On the other hand a change in the shift arrangements in order to shorten the time of completion would increase the number of workers that would have to be hired. It is advisable, therefore, to examine closely the current situation with regard to overtime and shifts in the shipbuilding industry.

According to a special survey made by the Bureau of Labor Statistics in December 1940, most private shipyards were operating two and three shifts per day. This survey covered 44 shipyards employing 97,000 workers. Only five yards reported working one shift; 23 shipyards were on a two-shift basis; and the remaining 16 shipyards worked three shifts. However, approximately 79 percent of the total number of workers in all yards were employed on the first shift; 17 percent on the second shift, and only 4 percent were employed on the "graveyard" shift. Operations on the second and third shifts were generally confined to work in "bottle-neck" departments. Similarly United States Navy Yards were operating three shifts, but the numbers employed on the second and third shifts were quite small.

Overtime was widespread in the shipbuilding industry. Approximately 62 percent of the workers in this industry worked overtime during the midweek of December 1940. The amount of overtime

put in by the average worker who worked overtime was a little more than 10 hours. Four overtime workers, therefore, performed the equivalent of an additional man's work during the week covered by the survey. Preliminary data for March indicated that no substantial changes occurred in the hours of overtime or the relative number of workers employed on the second and third shifts in shipyards.

Effect of Labor Turn-Over on New Workers Required

The rate at which separations occur in the shipbuilding industry will also have an effect on the number of new workers to be required. Separations in the shipbuilding industry during 1940, including quits, discharges, lay-offs, and miscellaneous separations, averaged 5.70 per 100 workers—more than double the 1939 separation rate. Primarily responsible for this high rate was the "lay-off" rate of 4.07. The separation rate "for other causes" in 1940 totaled only 1.63 per 100 workers employed. Separations continued high in January 1941—considerably above the rate in the same month of 1940.

It is not possible to project the separations into the future to estimate the additional workers required from month to month as a result of labor turn-over in the shipbuilding industry. However, the number of workers hired from month to month as a result of labor turn-over undoubtedly will be substantial. Although this will not result in any increase in the total number of workers working at any one time, it does increase the number of new workers that will have to be hired to maintain that force.

Coverage of the Employment Estimates

It should be emphasized that the estimates of labor requirements presented here represent complete coverage for the industry. The estimates for new ship construction are based on the number of workers required on all vessels under contract on March 31, 1941. They do not include, therefore, the employment that will be required when contracts are let for additional vessels, such as the 400 small naval craft and cargo vessels already mentioned. Furthermore, the estimates cover only the employment necessary at the shipyards and do not include the labor required for the manufacture of steel, machinery, and (in the case of naval vessels) armor plate and armaments. The estimates of employment for the United States Navy Yards do not include employment for the Washington Navy Yard or the Newport, R. I., torpedo station.

It should also be borne in mind that the estimates show the number of workers required at shipyards to maintain present scheduled operations. The construction schedule itself has been drawn up on the basis of past experience in securing materials and labor. If

shortages develop, the time allotted to the program may have to be extended and the employment schedule would have to be altered.

Labor Requirements by Occupation

In addition to the number of new workers, it is also essential to know the types of skills which will be required by the shipbuilding industry. Approximately 48 percent of the 309,000 workers to be added by September 1942 will be skilled workers, 24 percent will be semiskilled, 23 percent unskilled, and the remainder supervisory employees. The more important skills required are machinists, welders, shipfitters, sheet-metal workers, and electricians.

An inventory of defense labor supply made by the Social Security Board indicates the number of unemployed skilled workers seeking employment in the shipbuilding industry at the present time. This inventory is based on workers registered with 1,500 State employment offices. According to this report, the number of registrants for shipbuilding employment was relatively insignificant. Slightly more than 6,600 skilled shipyard workers were registered with State employment offices on February 14, 1941. This number amounts to only 4 percent of the additional skilled workers estimated as needed in shipbuilding by September 1942. Of course, it may be possible to draw upon skilled workers in other industrial groups, such as construction, to meet some of this need. A substantially larger number of skilled workers in the construction industry were registered with local employment offices in November. It is entirely possible that a number of these workers, such as riveters, sheet-metal workers, and steamfitters, might be utilized by the shipbuilding industry.

The shipbuilding industry will be faced with a tremendous problem in obtaining the necessary skilled workers. This need will undoubtedly be met in part by "upgrading" and by adaptation of existing skills. However, the major part of the labor force will have to be recruited from the outside. The shortage of available skilled workers in this industry is such that most of the new workers will require careful selection and extensive training before they can be utilized effectively in the shipbuilding program.

SHIFT OPERATIONS IN THE MACHINE-TOOL INDUSTRY, MARCH 1941 [1]

Summary

MACHINE-TOOL plants were characteristically operating two or three shifts per day during March 1941, with practically all the workers

[1] Prepared by Morris Levine of the Bureau's Employment Statistics Division, under the direction of Lewis E. Talbert, chief.

putting in from 8 to 20 hours of overtime during the week. Comparatively few plants that were operating with 2 or 3 shifts, however, had actually developed anything approximating full utilization of either the second or third shift.

The above data are based on preliminary reports of a survey conducted by the Bureau of Labor Statistics at the request of the Office of Production Management, covering 12 industries of key importance to the defense program. The 90 plants included in this report employed 60,000 wage earners in March, or 68 percent of the estimated total for the industry.

Shift Operations

Although multi-shift operations were prevalent, 71 percent of the wage earners in the 90 surveyed plants were employed on the first shift. The 7 plants operating on a single-shift basis represented about 3 percent of the workers in the reporting establishments as measured by the number of wage earners on the first shift. The 26 plants operating 3 shifts employed more than one-third of the total reported wage earners.

The distribution of all wage earners in the 90 plants, by shift, is shown in table 1.

TABLE 1.—*Employment in the Machine-Tool Industry by Shift, March 1941*

Shift schedule	Number of plants	First shift		Second shift		Third shift	
		Number of wage earners	Percent of total	Number of wage earners	Percent of total	Number of wage earners	Percent of total
Total	90	42,766	71.3	13,512	22.5	3,696	6.2
1-shift plants	7	1,286	100.0				
2-shift plants	57	25,163	79.5	6,491	20.5		
3-shift plants	26	16,317	60.4	7,021	26.0	3,696	13.6

Work on the second and third shifts in many of the plants was limited to operations in "bottle-neck" departments and to maintenance and repair work. Only 10 of the 57 plants operating on a 2-shift basis were employing as many as 30 percent of their wage earners on the second shift (table 2). On the other hand, 6 plants were employing less than 10 percent of their force on a second shift, presumably using the second shift only for balancing production to permit full first-shift operation.

Of the 26 plants operating 3 shifts (table 3), there were 7 that employed as may as 40 percent of their workers on the two added shifts and 9 plants employed between 30 and 40 percent on the added shifts. In contrast, 10 plants employed less than 30 percent of their wage earners on other than the main shift, third-shift operations in these 10 plants occupying less than 5 percent of the workers.

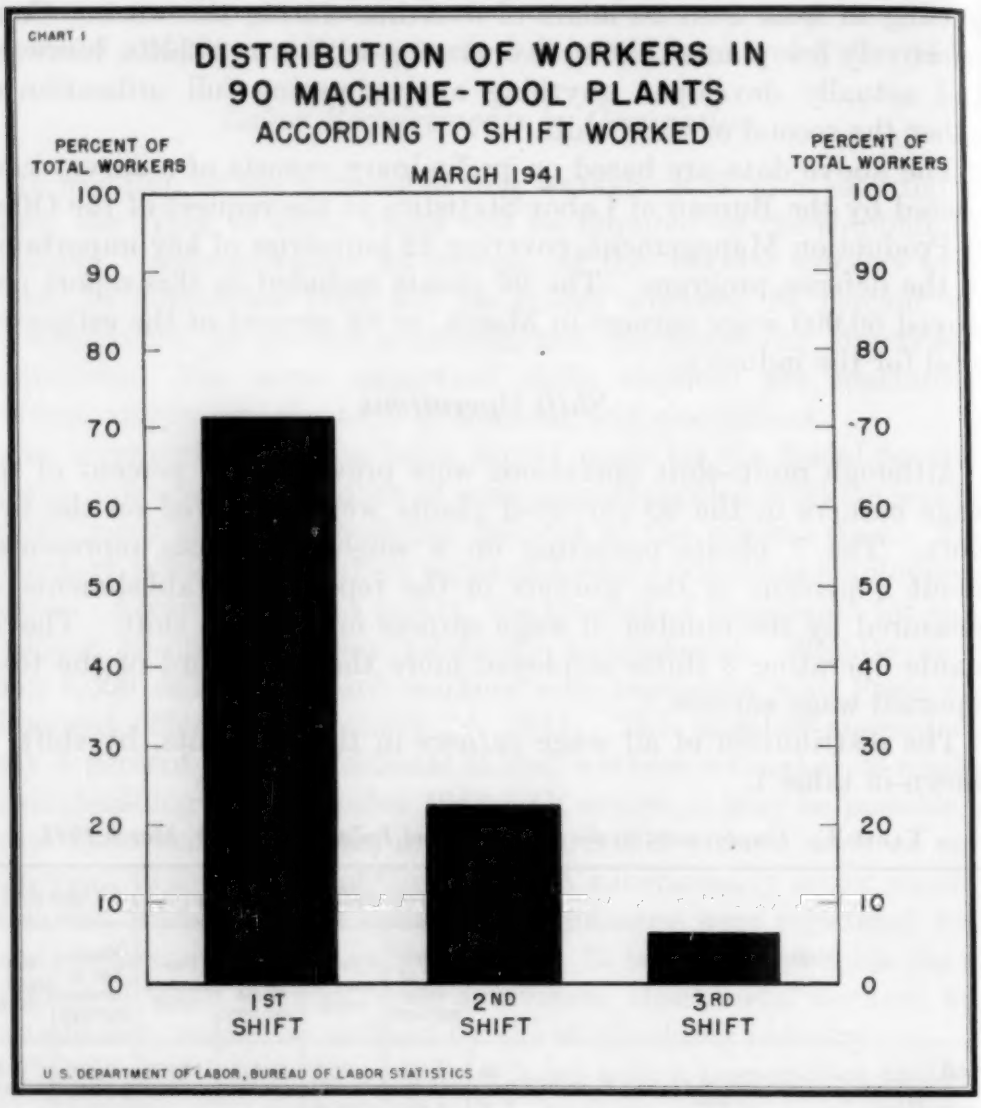


TABLE 2.—*Employment in 2-Shift Machine-Tool Plants, March 1941*

Percent of employees working on second shift	Total Number of plants	Number of wage earners	Wage earners on—				Overtime	
			First shift		Second shift		Percent of wage earners working overtime	Average overtime per wage earner working overtime
			Number	Percent	Number	Percent		
								Hours
Total	57	31,654	25,165	79.5	6,491	20.5		
Over 30 percent	10	5,180	3,371	65.0	1,809	35.0	97.5	16.7
20 to 30 percent	16	7,174	5,387	75.1	1,787	24.9	91.2	17.0
15 to 20 percent on second shift	14	11,943	9,845	82.4	2,098	17.6	95.7	13.7
10 to 15 percent	11	5,387	4,756	88.3	631	11.7	94.9	10.1
Less than 10 percent	6	1,980	1,804	91.1	166	8.9	98.6	12.5

TABLE 3.—*Employment in 3-Shift Machine-Tool Plants, March 1941*

Percent of wage earners on added shifts	Number of plants	Total number of wage earners	Employment						Overtime	
			First shift		Second shift		Third shift		Percent of wage earners working overtime	Average overtime per wage earner working overtime
			Number	Percent	Number	Percent	Number	Percent		
										Hours
Total	26	27,034	16,317	60.4	7,021	23.0	3,696	13.6		
Over 40 percent	7	21,404	6,281	50.7	3,776	30.4	2,347	18.9	91.9	9.5
30 to 40 percent	9	11,258	7,436	66.1	2,606	23.1	1,216	10.8	95.0	9.8
Less than 30 percent	10	3,372	2,600	77.1	639	19.0	133	3.9	90.0	12.7

Among 3-shift machine-tool plants, maximum operations on the added shifts were being practiced in March 1941 by 4 of the 7 plants listed in table 3 as working more than 40 percent of their workers on the 2 added shifts. These 4 plants employed 6,271 workers, distributed among the 3 shifts in the ratio of 10:7:5.

If plants on a 3-shift basis were to attain an objective of a 10:7:5 ratio in their employment by shift, it would be necessary for the 26 plants now working 3 shifts to add approximately 8,900 workers. This means that an increase of over 30 percent in employment might occur by building up complete 3-shift operation where only partial operation now occurs.

In the case of 2-shift plants, the maximum ratio in any one plant was 57:43. One other plant was operating with 42 percent of its workers on the second shift. Achieving the ratio of 65:35 as an objective at the present time would involve a substantial increase in second-shift employment in 49 of the 57 plants operating a second shift.

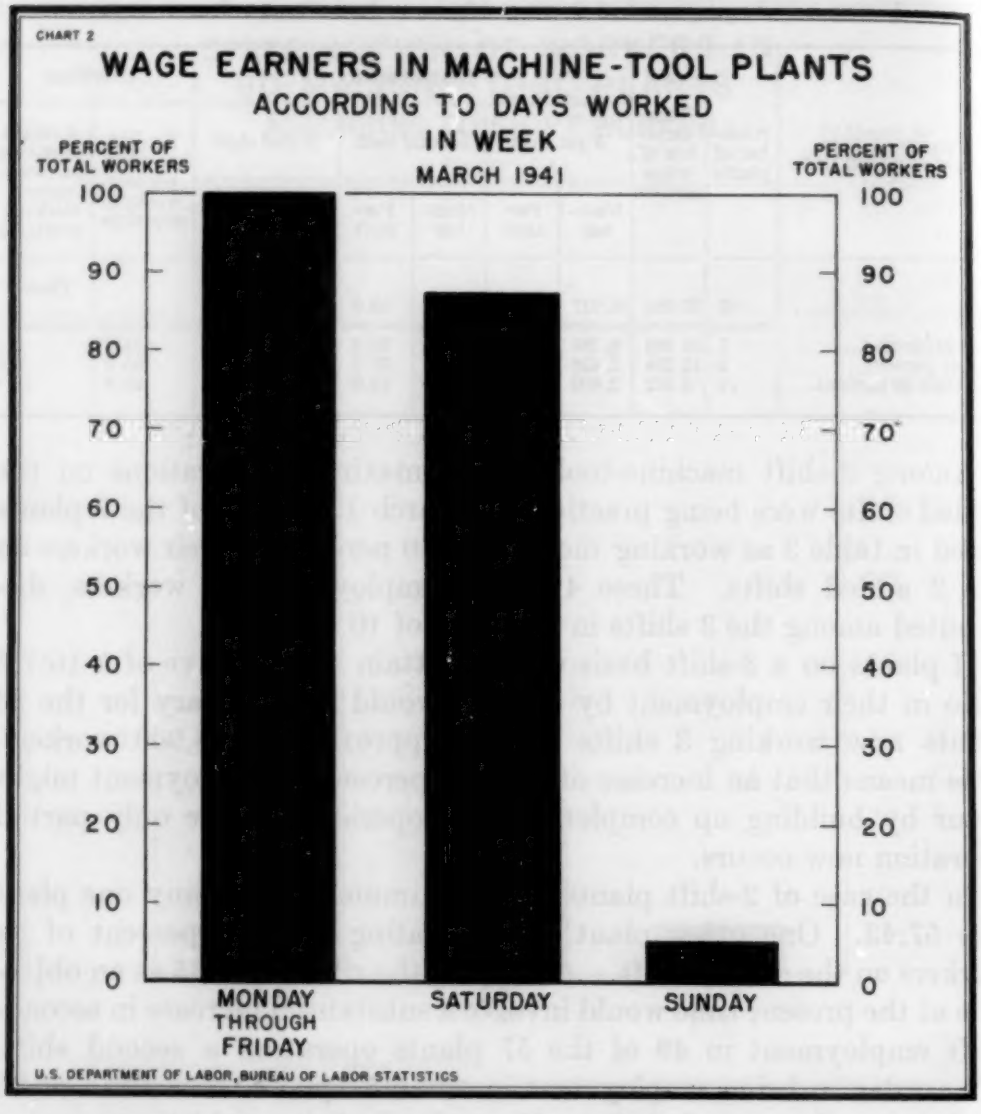
In order to bring employment in these 57 plants to a ratio of 35 workers on the second shift to 65 on the first, it would be necessary to hire 7,000 additional workers—an expansion of 22 percent.

Finally, if the 7 plants operating on a single-shift basis in March 1941 were to change to 3-shift operation in the ratio of 10:7:5, about 1,500 additional workers would be needed.

In sum, the raising of employment in the 90 establishments to the maximum shift ratios being practiced in March 1941, would require the hiring of approximately 17,500 additional workers. It would be possible, therefore, to increase employment in these 90 plants by 29 percent by building up to full 2-shift or 3-shift operation.

Extent of Overtime

Nearly 95 percent of the workers in the machine-tool industry worked overtime during March, averaging 12½ hours of overtime each during the week.



The greatest amount of overtime was being worked in plants on a 2-shift schedule. Among the 2-shift plants, those operating with the maximum number of workers on the second shift were also averaging over 16 hours of overtime per week. This implies an average workweek in these plants of 55 to 60 hours.

It is significant that the 2-shift plants with a smaller proportion of their workers on the second shift were operating with less overtime than the above-mentioned group. Thus in the 31 remaining 2-shift plants, overtime averaged approximately 12 hours per week.

In the case of plants operating 3 shifts, overtime averaged about 10 hours during the week. In most cases, the overtime represented a sixth day of work rather than the lengthening of shifts.

Extent of Week-End Shut-Down

An indication of the extent of the week-end shut-down in machine-tool plants appears in a comparison of the number of persons at work

on Saturday and Sunday of the surveyed week as compared with the rest of the week. Practically all of the reporting establishments had their full force at work on Saturday, 87 percent of the wage earners in all the plants being at work on that day. On Sunday, operations were carried on to some extent at 25 of the 90 surveyed plants, but only 5 percent of the total working force was at work on that day.

	Plants in operation	*Persons at work*	
		Number	*Percent of total*
Monday to Friday	90	59, 977	100. 0
Saturday	90	52, 288	87. 2
Sunday	25	3, 116	5. 2

Comparison of Operations With December 1940

The progress made in operations in the machine-tool industry between December 1940 and March 1941 is indicated by a comparison of reports covering 26 plants for both periods. Over this period employment in these plants increased by 11 percent.

The number of workers in the first shift increased by 1, 179, or from 22,090 to 23,369; in the second shift by 1,670, or from 5,945 to 7,413; and on the third shift by 487, or from 1,753 to 2,240. In other words, two-thirds of the increase of employment resulted from the more intensive utilization of the second and third shifts. Even with this increase, however, the proportion of workers on the first shift was reduced only from 74.2 percent to 71.1 percent.

One of the most significant changes in operations between December and March was the increase in the amount of overtime worked. During this period the average overtime worked per week increased by 2 hours. In addition, 1 plant changed from 1- to 2-shift operation and 2 additional plants were operating 3 shifts per day. Since their December report, 5 of the 26 plants had increased their days of operation per week from 5 or 5½ to 6 or 7 days.

MAXIMUM AGE FOR CIVIL-SERVICE POSITIONS UNDER NATIONAL DEFENSE

AS A result of the demand for skilled mechanics in connection with the defense program, the examination age limits previously established by the Federal Civil Service have been raised in many cases.

For three occupations in the War Department—harness cutter, harness machine operator, and saddle maker—the maximum age limit for taking the civil-service examinations is now 65. In certain other occupations the age limits are 62 and 55 years. The maximum ages for a large number of occupations are given in the accompanying table, based on a chart prepared by the Federal Civil Service Commission.

Maximum-Age Limits for Examinations for Specified Federal Civil-Service Positions Under Defense Program, March 1, 1941

Age limit	Occupations in—		
	War Department	Navy Department	Treasury
65 years	Harness cutter. Harness machine operator. Saddle maker.		
62 years	Assembler. Barrel rifler. Barrel straightner. Die sinker. Gauge checker. Gauge maker. Instrument maker. Lens grinder. Machinist. Set-up-man (automatic screw machine). Tool and gauge designer, sr. Tool grinding machine operator. Toolmaker.	Aircraft occupations: Fabric worker, jr. Instrument mechanic. Mechanic (general). Mechanic (motor). Anglesmith. Coppersmith. Die sinker. Flange turner. Hammer runner, other. Instrument maker. Ironworker (shipfitter duty). Loftsman. Machinist. Metalsmith. Ordnanceman (torpedo). Patternmaker. Pipefitter. Precision lens, prism and test plate maker. Sailmaker. Sheet-metal worker. Shipfitter. Shipwright. Tool and gauge designer, sr. Toolmaker.	Shipwright.
55 years	Aircraft occupations: Electrician. Engine mechanic. Engine test operator. Instrument mechanic. Instrument mechanic helper. Instrument mechanic, jr. Mechanic. Propeller mechanic. Sheet-metal worker. Sheet-metal worker, jr. Woodworker. Wireworker.		Ship joiner.

PAPER-INDUSTRY POLICIES ON MILITARY ABSENCES

A FEW paper and pulp companies had established policies covering absences of employees for National Guard and Reserve Corps training periods prior to the passage of the Selective Training and Service Act, but since September 1940 old policies have been revised and new ones established by many companies in this industry. A recent report by the American Paper and Pulp Association covers the practices of 115 companies regarding absence for military service.[1] Definite policies had been established by 102 companies while several of those remaining planned to formulate definite policies in the near future.

Although the selective service law does not apply to volunteers, 68 of the companies extend coverage in their stated military-absence

[1] American Paper and Pulp Association. Company Policies Regarding Military Absences in the Paper and Pulp Industry. New York, 122 East 42d Street, 1941.

policies to volunteers as well as to members of the National Guard and Reserve Corps and to draftees; 16 cover drafted men and members of the National Guard and Reserve Corps; and 2 cover conscripted men only. Since the job-protection provisions of the military-training legislation do not include temporary workers, part of the companies restrict their policies to employees with certain minimum periods of company service. Twenty-seven companies require at least a year of service, while 15 require periods ranging from 30 days to 6 months; 10 companies cover all employees except those on a temporary basis; and 42 companies cover all employees regardless of length of service. Eight companies, according to the report, had no expressed policy on this point.

Since the selective service law permits the payment of compensation by any person, firm, or corporation to drafted employees, a number of companies have elected to make such payments. Thirty-one of the 102 companies have provided for payments to trainees, the lowest allowance so made being 1 week's full pay and the highest being 1 year's company pay less 1 year's pay from the Government. Over half of the companies allow from 2 weeks' to a month's wages, while nearly 20 percent pay employees at least one-half of the difference between their normal earnings and Government compensation during the entire training period of 1 year. In some cases, also, vacation pay is allowed for a trainee's unused vacation time. It has recently been ruled by the United States Treasury that payments made to employees for military service do not constitute "wages" for social-security tax purposes.

It is a provision of the act that trainees be granted a leave of absence for 1 year plus an additional 40 days. The policies of the companies differ as to seniority rights, 53 having reported that they were allowing employees to accumulate seniority during absence for military service, 38 that they were "freezing" seniority as of the date of leaving for military service, and 11 that they had no expressed policy on the question of seniority.

Eighty-seven companies had group life-insurance plans, and in 61 cases the insurance was being continued for employees while in service. In 18 cases the insurance was not being maintained, and 8 companies had no expressed policy in this matter. Employees chosen for military service are in the age grouping with the most favorable mortality rating, and to continue their participation should tend to keep the premium rates down. Moreover, the report states, some companies believe that the small cost to the employers of paying the drafted worker's share of the premium will be more than repaid by the favorable reaction of their working forces. Of the 61 companies reporting on their policy in this respect, 49 will pay both their own and the employees' premiums, in 8 cases the premium will be paid

jointly by the company and the employee, and in 4 cases the employee will be responsible for the payment of the entire premium. Most companies have discontinued group health and accident coverage, since the Government provides disability and other benefits for trainees.

Vacancies created by the departure of employees for military service are filled in most cases by temporary promotions and redistribution of duties as far as this is practicable, and most of the companies have adopted the policy of informing anyone hired to take the place of a trainee that the position is temporary. In some cases the new employee is required to sign a statement that he understands the work is temporary and that he is subject to discharge when the trainee returns.

Several companies stated that their policies governing military absences were subject to change at the company's discretion or in the event that this country becomes actually engaged as a belligerent in the war.

NEGRO PARTICIPATION IN DEFENSE WORK

FROM the very beginning of the present emergency the directors of the defense efforts of the United States were aware that total defense would be impossible without a full utilization of the country's human resources. This was pointed out in an address, made before the First Annual Conference on the Negro in Business, by Sidney Hillman, Associate Director General of the Office of Production Management. The following data are taken from his address.[1]

Training program.—As a first step in solving the problem at issue the National Defense Advisory Commission endeavored to have provision made for the training of Negro workers in order that they might be qualified for employment under the defense program when industrial expansion would require an increased number of workers. Consequently, when the United States Office of Education started its defense training program in the summer of 1940, the Commissioner of Education stated, at the request of the National Defense Commission, that "in the expenditure of Federal funds for vocational training for defense, there should be no discrimination on account of race, creed, or color."

This announcement was implemented when further appropriations were made for training for national defense. Again, in accordance with the plans of the National Defense Advisory Commission, the training legislation provided that—

> No trainee under the foregoing appropriations shall be discriminated against because of sex, race, or color; and where separate schools are required by law for separate population groups, to the extent needed for trainees of such groups, equitable provision shall be made for facilities and training of like quality.

[1] United States. Office of Emergency Management. Defense (Washington), April 29, 1941.

Employment policy.—Paralleling this drive for training Negroes for defense work, the Commissioner of Education took up the problem of equitable job opportunities, stating from the outset that "workers should not be discriminated against because of age, sex, race, or color."

Construction work.—At Fort Meade in Maryland, Fort Jackson in South Carolina, Fort Robinson in Arkansas, and in scores of other camp constructions, skilled, semiskilled, and unskilled Negroes were widely employed. Over 2,500 Negro carpenters alone worked on these various projects at $8 to $12 per day, and thousands of brickmasons, roofers, cement finishers, plasterers, power-saw operators, and other skilled and semiskilled Negroes, were and are being employed. At one time during the construction work at Fort Jackson, over 600 Negro carpenters were on the pay roll. The hiring of 300 Negro carpenters during the construction of the United States Army Hospital at New Orleans set a record for that occupation in that community.

In the Ozark Mountains in Missouri, in a locality in which not over 10 Negro families were living, over 150 Negro carpenters were given jobs through the aid of Dr. Robert C. Weaver's office; moreover, approximately 300 Negro bricklayers were placed on a single construction job in Indiana, and tens of thousands of unskilled Negroes obtained employment throughout the United States.

The recent hirings of Negroes in building construction have been duplicated less conspicuously in other fields in which Negro labor had already been trained. For example, the iron and steel industry indicates a greater absorption of skilled and semiskilled Negroes. Establishments in several northern sections have recently been seeking to bring Negro foundry workers from the South; and job opportunities are also increasing in the latter section.

In reporting on the developments in the above-mentioned fields, the speaker said that he did not wish to give the impression that the Office of Production Management is "interested only in advancing the Negro skilled worker in the fields in which he has already gained employment." He stated that the position of the OPM had been recently expressed by him in a communication to all defense contractors, which declared "that every available source of labor capable of producing defense materials must be tapped in the present emergency. And this applies to the important new defense industries as well as to the old established ones."

The Negro in aviation.—The problem of a fair deal in employment for Negroes has already arisen in the aviation industry as in all other industries, and the OPM intends to continue its campaign there. Three significant developments indicate that progress may be looked for in that field. Confronted with a labor shortage, one aircraft factory in California is trying out a Negro unit. An aircraft manufacturer in Ohio is contemplating hiring at least 300 Negroes. In

Missouri another employer has pledged himself to use a substantial number of Negroes in his aircraft establishment.

Statement of Committee on Negro Americans in Defense Industries

On May 7, 1941, about 60 representative citizens of the North and South issued a statement urging that greater numbers of competent Negroes be employed in defense industries and that opportunities for special industrial training be made more generally available to them. In releasing this statement to the press, Dr. Anson Phelps Stokes, the chairman of the Committee on Negro Americans in National Defense Industries, said: "We wish as independent citizens to support the recent efforts made with encouraging results through the Office of Production Management to speed up defense industries. One way of accomplishing this is by the larger employment of skilled Negro mechanics, especially in fields where there is a labor shortage. In this way we can help place our industrial life in this national emergency on a more effective basis. An 'all-out' defense effort cannot disregard the Negro tenth of our population which is known for its loyalty."

Foreign Wartime Policies

EXTENSION OF COVERAGE OF CANADIAN INDUSTRIAL DISPUTES ACT

ORDER in Council P. C. 3495 of November 7, 1939,[1] extended the Industrial Disputes Investigation Act to apply to all industries engaged in war production.[2] Included in this provision were the manufacture and handling of commodities which, in the judgment of the Minister of Labor, "would be essential for the needs of the Government or of the country in war." An order in council (P. C. 1708, Mar. 10, 1941) makes it obvious that "commodities may be essential even though they are not specifically required for the use of His Majesty's Forces."

Under this authorization the Ministry of Labor has recently ruled that both the pulp and paper industry and gold mining are essential war industries, in view of the great amounts of American exchange which they make available for purchasing war supplies in the United States—$240,000,000 and $200,000,000 per annum, respectively.

The decision on gold mining was necessitated by British Columbia's repeal in 1937 of its enabling legislation, which removed this industry from the provisions of the Industrial Disputes Investigation Act.

APPLICATION OF WARTIME WAGE POLICY BY CANADIAN CONCILIATION BOARDS

THE Canadian Order in Council P. C. 7440, of December 16, 1940, set forth principles of wartime wage policy which had been established by the Government to guide agencies dealing with industrial controversies.[3] The Dominion Department of Labor made a draft of these principles and a draft of the wage-policy statement was distributed to 12,000 employers and labor organizations during the first quarter of 1941. As a result, a few suggested modifications were received by the Department which on March 31, 1941, issued the following circular letter on wartime wage policy,[4] primarily for

[1] See Monthly Labor Review, February 1941.
[2] Data are from Canadian Labor Gazette (Ottawa), April 1941.
[3] See Monthly Labor Review, Washington, February 1941 (pp. 332-333).
[4] Report from Avery F. Peterson, United States Consul at Ottawa, Canada.

use of the boards of conciliation and investigation, dealing with labor matters.

Text of Circular Statement on Wartime Wage Policy

1. *Purpose of the order in council.*—The purpose of the order in council is to establish a uniform wage policy for boards of conciliation and investigation by providing that, subject to certain exceptions stated in section 5 below, the highest wage rates generally prevailing and normally established for the different occupations in any given establishment during the period 1926–29 or any higher rates established thereafter but before December 16, 1940, shall be accepted as fair and reasonable, and that such wage rates may be supplemented by a separate bonus as the cost of living rises.

2. *Adjustment of wage rates in normal cases.*—(a) Subject to the exceptions stated in section 5 below, wage rates which are as high as or higher than the highest rates established during the period 1926–29 or thereafter may not be changed, but wage rates which are lower than the rates during that period may be increased up to that level.

(b) In comparing the wage rates of piece workers, account should be taken not only of the straight piece-work rate but also of any applicable incentive bonus.

(c) The order clearly indicates that comparison of existing wages with those of the period 1926–29 must be made on the basis of wage rates, not earnings. It definitely mentions wage rates and wage-rate levels but makes no mention of earnings (secs. 2, 3, and 5). The principal question at issue, apart from the conditions referred to in sections 3 and 4, is whether present wage rates differ from those of the base period. Other considerations, such as guaranties of employment or a longer or shorter workweek, which may have obtained in the 1926–29 period but are no longer in effect, have no import under the order.

3. *Cost-of-living bonus.*—(a) A cost-of-living bonus may be given to protect the worker not from increases in the cost of all his purchases but only from increases in the cost of the basic necessities of life. A flat bonus is therefore suggested because a bonus computed as a percentage of wage rates or earnings would favor the better-paid workers, defeat the purpose of the order by preventing that decline in the consumption of nonessential commodities which is required by war conditions and is necessary to prevent inflation.

(b) In view of the wide variations in the wage rates of individuals and occupational groups, if the bonus were determined independently in each industrial establishment or even each economic area, many arbitrary decisions would be involved and confusion would result. Therefore the following standard formula is suggested on the rough assumption that a wage of $25 per week leaves a family practically no margin for expenditures on anything but the basic necessities of life:

When the Dominion Bureau of Statistics index for the Dominion or for the region advances 5 percent: (1) full-time workers might receive a maximum weekly bonus of $1.25; (2) part-time workers would then receive an hourly bonus of $1.25 divided by the normal weekly hours worked in the establishment in question; (3) male workers under 21 years of age and female workers, if employed at basic rates of less than 50 cents an hour on jobs which by custom or practice are not ordinarily assigned to adult male workers, might receive a bonus of 5 percent of their basic hourly rates (maximum $1.25 per week). Proportional increases may, of course, be made in the bonus when the advance in the cost of living exceeds 5 percent.

(c) The order does not limit the bonus to installments of 5 percent or multiples thereof. It does direct, however, that bonuses may not be granted (1) until 3

months have elapsed since the last wage adjustment or bonus determination and (2) unless the cost of living has increased by at least 5 percent since the last previous determination of a bonus payment or wage adjustment.

(d) The order does not preclude the granting of a wage increase (within the terms indicated) and a cost-of-living bonus simultaneously.

4. *Computation of changes in the cost of living.*—(a) In most instances the new cost-of-living index for the Dominion prepared by the Dominion Bureau of Statistics will be the median for measuring changes in the cost of living. In special circumstances, however, regional indices prepared by the Dominion Bureau of Statistics may be used.

(b) If wage rates have not been increased since August 1939, the change in the cost of living should be computed since August 1939. If wage rates have been increased since August 1939, the change in the cost of living should be computed since the date of the most recent increase in wage rates.

(c) In August 1939, the index number of the cost of living was 100.8. A 5-percent increase in the cost of living since August 1939 would therefore be indicated by an increase of 5.04 points in the index number. In December 1940, the index number was 108.0. A 5-percent increase since December 1940 would therefore be indicated by an increase of 5.4 points in the index number. The absolute change in the index number is, however, so close to the percentage change that for all practical purposes the absolute change in the index number may be taken as the percentage change in the cost of living. For example, the percentage change in cost of living between August 1939 and December 1940 may be taken as 7.2 percent (108.0 minus 100.8) instead of 7.14 percent (7.2 divided by 100.8).

5. *Adjustment of wage rates in exceptional cases.*—(a) Regardless of whether present wage rates are less than, equal to, or higher than the highest wage rates established during the period 1926–29 or thereafter, if it is shown that such highest rates were depressed or subnormal, a board may recommend an increase to any level which it considers fair and reasonable.

(b) If present wage rates are equal to or higher than the highest wage rates established during the period 1926–29 or thereafter, but it is shown that such highest rates were unduly enhanced or abnormal, a board may recommend that the present rates may be reduced to any level, not less than that prevailing on December 16, 1940, which it considers fair and reasonable.

(c) If present wage rates are less than the highest wage rates established during the period 1926–29 or thereafter, but it is shown that such highest rates were unduly enhanced or abnormal, such highest rates need not be restored, but a board may recommend that the present rates be increased at a rate of not more than 5 percent per year.

BRITISH NATIONAL SERVICE ACT OF 1941 [1]

COMPULSORY recruitment for civil-defense work is authorized under the terms of the British National Service Act which was adopted in April 1941. The purpose of the law is to enable the men who are liable for military service and the conditionally registered conscientious objectors to be called for civil defense on broadly the same lines as for the armed forces. Conscription for civil defense became neces-

[1] Sources: Great Britain, Parliament, National Service Bill, 1941 (No. 19) and House of Commons, Debates, March 26, April 1 and 2, 1941.

sary as a result of the shortage of full-time workers in certain districts. The original plan called for a citizen force of part-time, unpaid volunteers and, even though the need has arisen for conscription on a full-time basis, the Minister of Labor and National Service paid tribute to the voluntary response for service. The Minister also pointed out that the greatest care has been taken to keep civil defense a civilian job and that conscientious objection to civil work cannot be admitted.

Assurance was given in the House of Commons by the Government that it was not proposed to draft younger men into the civil-defense service but to draw on those over 30 or 35 years of age. They may be called up to the age of 41, the maximum under the National Service (Armed Forces) Act of 1939. Prior to enactment of this legislation, men enrolled for civil-defense duty were in the service of the local authority, whereas now they are in the service of the Crown.

Persons who are liable for civil defense are permitted to express a preference as to the kind of work they wish to perform. Notices are to be served on persons liable for civil-defense service if they have been medically examined, calling them for duty. The notice, known as an "enrollment notice," requires the recipient to present himself at a designated time and place. If any eligible person on whom an "enrollment notice" is served fails to comply with the requirement of the notice he is guilty of an offense. The penalty on conviction or indictment is imprisonment for a term of 12 months, or a fine, or both; and on summary conviction 6 months of imprisonment, or a fine, or both.

If accepted for civil defense a person is required to continue in the service of the Crown until the end of the present emergency, unless he is previously discharged. Service will be in the defense force to which he is assigned in the "enrollment notice" or to any service in which he is later placed. He may not be required to serve outside the United Kingdom or the Isle of Man. He is subject to the provisions of defense regulations or orders. Conditions of service as to pay, allowances, clothing, expenses, and other matters are to be fixed by the Minister of Home Security with the approval of the Treasury. A man serving in the civil-defense service under this act is not liable to be called up for service in the armed forces.

Special provision is made for the review of cases of conscientious objectors who have good reason for failure to register. Such cases may be referred to a local tribunal and appealed to the appellate tribunal. The decision of the appellate tribunal is final. Machinery is also provided for removing the names of registered conscientious objectors for this class and for registration for military service, on application by the conscientious objector.

Industrial Relations

FINNISH GOVERNMENT DECLARATION ON INDUSTRIAL RELATIONS AND WAGES

THE Minister of Social Affairs of the Finnish Government on February 20, 1941, issued a declaration of policy which he recommended should be followed in the revision of wages and in industrial relations generally.[1] This statement was in response to a request from the Finnish Employers' Central League and the Central Federation of Finnish Trade Unions. The principal provisions of the declaration follow:

The Minister, speaking for the Council of State, emphasized the importance of maintaining industrial peace, through agreements arrived at as a result of free and voluntary negotiations. He urged workers' and employers' organizations to consider without prejudice the introduction of a system to guarantee peaceful relations for longer periods of time and to increase at the same time the security of both employers and workers.

With regard to wage increases, he suggested that the following general principles should be taken into consideration in making wage adjustments:

(a) The wage policy under present conditions should correspond with Finland's national economic possibilities and should be at the same time of a strongly social character; help should be given, above all, to those in the weakest economic position.

(b) Wage increases exceeding the rise in the cost-of-living index should be considered only in the case of the lowest-paid groups of workers and in certain exceptional cases.

(c) Full compensation corresponding with the increased cost of living should, in so far as possible, be granted to workers and groups of workers whose wages are below the average wages paid in the same plant.

(d) The wages of other workers should be raised on a declining scale so that the average of all wage increases may correspond with about two-thirds of the increase in the cost-of-living index.

The Council of State, he said, is prepared to appoint a committee consisting of one employers' and one workers' representative, under the chairmanship of the Chief of the Bureau of Social Research, to supervise the calculation of indexes of living costs.

[1] Data are from Report of H. F. Arthur Schoenfeld, United States Minister to Finland.

It is desirable that the parties concerned should agree on wage questions through their respective organizations and should see that the agreements are properly kept; for unorganized establishments the Government will consider the possibility of establishing one or more wage-control committees to investigate complaints and to take necessary action.

The Government will issue a regulation, agreed upon in cooperation with the employers' and workers' organizations, providing for the order in which workers may be discharged in cases of lack of work.

The Government favors special subsidies for large needy families.

The presidents of the Finnish Employers' Central League and of the Central Federation of Finnish Trade Unions affirmed that the Government declaration corresponded with the interests of both employers and workers, and that every possibility existed for the development of labor relations in Finland along these lines.

Employment and Labor Conditions

EMPLOYABILITY OF PERSONS ON RELIEF IN MARION COUNTY, INDIANA

IN SPITE of a rapid rise in business activity, industrial production, and employment, unemployment relief continues to be a problem in most communities. This has raised the questions as to whether there is a "hard core" unemployment-relief case load which is not directly affected by increased employment, whether such a relief load is to be a permanent feature of society, and what measures can be taken to remedy this condition. In an attempt to throw some light on these questions a commission appointed by the Governor of Indiana made a special study [1] of the recipients of township relief in Marion County, in which Indianapolis is located. The study was based on a sample of recipients of township relief and WPA workers in the county in May 1940, every fifth case on the active files of the township trustee's office and on the WPA rolls being included in the sample. A home visit was made for each case selected.

The report of the commission here reviewed deals with the more significant findings concerning the employment possibilities of the employable members of these families.

The population of the county is predominantly made up of native-born white persons, only 3.6 percent being foreign born and 10.6 percent Negroes. During May 1940, 14.1 percent of all persons in the county were receiving unemployment relief or assistance under the social-security program, or were employed by the WPA, as compared with 15.1 percent for the entire State. Unemployment relief is administered by the township trustees, who also certify persons for surplus commodities given by the Federal Government and may likewise refer individuals to the Unemployment Relief Commission for certification for WPA employment. In addition, the county Department of Public Welfare administers relief for special classes, such as the aged, the blind, and children deprived of parental support, and approves applicants for NYA and CCC employment.

[1] Governor's Commission on Unemployment Relief. Factors Affecting Employability of Persons on Relief in Marion County, Indiana. [Indianapolis?], 1941.

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Composition of Relief Families

The families covered by the survey were mainly settled residents of the county, only 4.8 percent having less than 5 years' residence, while 57.3 percent had been in the county more than 20 years or were born there. Single persons, who formed 16.8 percent of the surveyed group, were not included in the figures relating to families. Slightly more than 16 percent of the relief families had no employable member. Thus, even if every employable member of the entire group found employment, over 16 percent of the township relief families would not be affected.

Of the families surveyed 42.3 percent had been on relief 5 years or more and only 15.9 percent for less than 1 year. A classification of the persons on relief, by employment status, showed that 63.4 percent were not seeking work. More than half of this group were children under 16 years of age, while the remainder were housewives, physically or mentally handicapped persons, students, and those too old to work. This large proportion of persons on relief, therefore, was in categories for which there was little possibility of employment.

The Employables

In discussing the question of employability it is pointed out that "employability is not an absolute concept, but rather a relative criterion which may vary according to changing conditions. Although the idea of employability is vague and difficult to define, it has, nevertheless, formed the basis for delineating the areas of general relief activities between the Federal Government on the one hand and the State and local governments on the other. In theory at least the Federal Government provides work through the WPA to 'employable persons' and the State and local governments are to assist the 'unemployables' through direct relief."

Although it is practically impossible to measure absolutely the employability of a person, since this depends upon various factors such as skill, age, work and personality habits, employment history, physical condition and other factors, as well as the demand for workers in an occupation for which an unemployed person is qualified, an attempt was made in the study to determine the employability of those classified as employables. The factors on which this determination was made were the occupation of the individual, age, sex, race, and some data on physical condition. In general, it was assumed that a highly trained person had a better chance of obtaining a position than an unskilled laborer. In the group of employables on the relief rolls nearly half were semiskilled and unskilled workers, one-quarter were in the domestic and servant classes, nearly 12 percent were skilled workers and foremen, and the remainder were clerks and sales per-

sons, proprietors and managers, farm owners and tenants, and professional persons. Because of the present demand for skilled workers arising from the defense program, it was evident that the relief rolls contained a majority of the least-employable persons.

The largest single group of those classed as employable was composed of unskilled laborers. Such workers generally occupy an adverse position in the labor market and although it might be urged that the defense program will absorb quite a large number of unskilled workers, the prospects were less favorable for the relief group in question since nearly a third were over 45 years of age, 43 percent had not worked regularly in 5 years, and more than 28 percent had never had a regular job.

In the domestic and servant classes, composed of maids, porters, scrubwomen, waiters and waitresses, janitors, elevator operators, etc., about three-quarters of the group were women. A large proportion of the women seeking employment in this group were not primary workers; that is, there were other employable members in their families, indicating that many of the women entered the labor market to supplement the family income. It was considered, therefore, that the solution of their problem lay not so much in finding jobs for them as in finding work for other members of their families. The men in this group were mainly primary workers and presented a different problem, as they were a more permanent part of the labor market and their families were dependent on their earnings. The members of this group might find employment in ordinary commercial channels and might be expected, therefore, to find work if business conditions improved, but for those rendering direct service to families the possibility of employment seemed to depend upon generally improved earnings which would enable members of the community to afford such services.

Among the semiskilled workers in the group were some formerly employed in occupations which might offer a reasonable employment expectancy, but among many of them the degree of skill was so slight that it could not be expected that there would be any particular employment demand for them as individuals.

About 56 percent of the skilled workers and foremen were over 45 years of age and a slightly higher percentage had not had a regular job in 5 years. However, in spite of these handicaps it appeared that the evident shortage of skilled workers would operate to diminish the importance of age as a deterrent to employment, while a short period of retraining might equip them for jobs.

The other groups—professional persons, farmers, proprietors and managers, and clerks—did not present a grave problem from a numerical standpoint; but 41 percent were over 45 years of age, while 44.4

percent had not been regularly employed in the past 5 years, and 15.6 percent had never had a regular job.

Employment History

In determining the work history of the relief group, a regular job was defined as work with the same employer for a period of 6 months or more. On this basis three-fourths of the employables had had regular employment, but of this group more than half had not worked regularly in the last 5 years.

Business conditions were directly responsible for the loss of jobs of 65.7 percent of the persons covered, while health or personal reasons were responsible in 23.1 percent of the cases, and working conditions or policies in 11.2 percent. For the nearly two-thirds of the group who lost their jobs because of business reasons, it might be considered that they were good employment prospects when they left the job. However, for the large group—40.6 percent of all employables—who had not had a job in the last 5 years this long period of unemployment has tended to reduce the value of their having once been regularly employed. The individuals who had no work experience or who had never been regularly employed represented 23.9 percent of the employable group. Nearly two-thirds of this group were under 25 years of age and less than 12 percent were high-school graduates. About the only asset for this group is their youth and the possibility that they could be trained.

Of the 16.9 percent of the employable group who were currently employed, only 5.4 percent were working full time and at an average wage of $11.40 per week, while the 11.5 percent who were working part time received an average wage of $3.60 per week. Nearly 37 percent of the employed persons were in domestic or personal service, but only 9.6 percent were skilled workers. It was considered that since low wages are a common problem in the domestic field there was little chance for improvement among these workers, although in the remainder of the employed group improving business conditions might bring more adequate incomes and therefore offer them a chance to leave the relief rolls.

Age and Race

One factor which was most significant was the age of the unemployed workers. Of the total number of employable persons, 23.3 percent were in the age group 15 to 25 years and 36.2 percent were 45 years and over. In the younger group 65.9 percent were either unskilled or in the domestic and servant classes and less than 5 percent were skilled workers. In spite of the lack of skill and education in this group, their youth alone would hold hope for their employment with better conditions. However, it is pointed out, if this group is not to

become a permanent relief group of the future, special attention should be given to vocational education and training for them.

The large group of older workers, while containing a higher percentage of skilled workers, might be expected to have better chances for reemployment, but nearly two-thirds of these persons had not been regularly employed in the last 5 years and more than one-quarter of them had had no regular employment during the past 10 years. The lack of regular employment for such long periods presents an especially serious handicap in obtaining employment for this older group.

Although Negroes formed only 10.6 percent of the population of the county, 44 percent of the employables were Negroes. Less than 20 percent of these persons were classified as skilled or semiskilled and this group represented, therefore, a rather specialized problem regarding their chances of employment in the future.

Employment Possibilities

In rating the employability of these individuals they were considered as having a negative rating if they had not had regular employment within the last 5 years, if they were unskilled laborers or domestics, and if they were over 45 years of age.

The following figures show the rating of all persons in the group considered to be employable.

Persons having—	*Percent*
No negative factors	14. 5
One negative factor	35. 8
Two negative factors	38. 4
Three negative factors	11. 3

As is indicated only 14.5 percent of all the employable persons satisfactorily passed the three criteria set up, namely, they were under 45 years of age, were not unskilled laborers or domestics, and had worked regularly some time during the past 5 years. Thus less than 15 percent of the employable persons on the relief rolls would be considered as having an excellent chance of finding private employment based on these three criteria. It should also be pointed out, however, that the 35.8 percent of the persons who passed two of the selected criteria, those listed with one negative factor, in view of increased employment, would have a fair chance of finding employment. Two negative factors were found in 38.4 percent of the group and all three in 11.3 percent of the total. Needless to say that for these last two classes, the data indicate little prospect for employment.

FEES OF PRIVATE EMPLOYMENT AGENCIES IN CALIFORNIA, 1940

SINCE 1923 every California fee-charging employment agency has been obliged by law to file with the State Division of Labor Statistics

and Law Enforcement a schedule of fees to be charged. In 1939 over $830,000 was paid to 204 private employment agencies in the State by job seekers in order to secure temporary and permanent employment in the teaching, nursing, commercial, domestic, hotel and restaurant, and general industrial fields. This amount does not cover the fees aggregating about $5,000,000 paid to theatrical and motion-picture employment offices or fees collected by agricultural contractors supplying workers for farm operations.[1]

California fee-charging employment agencies are also required by law to be licensed by the State Division of Labor Statistics and Law Enforcement and to be bonded by reliable bonding companies.

The premises on which the employment agency is located must be approved by the State Commissioner of Labor and such agency may not operate "in connection with lodging houses, restaurants or pool rooms or in connection with buildings or premises where intoxicating liquors are sold or consumed." The contract and receipt forms of the agencies must be approved by the labor commissioner, and the agencies must also keep records of applicants and jobs obtained as provided by the State Labor Code. Furthermore, a copy of the schedule of fees which is filed with the labor commissioner must be certified by that official and posted in a conspicuous place in each room frequented by job applicants.

Although the schedule of fees must not be posted before it is certified by the commissioner, the law does not provide for the regulation of the amount of the fees agencies propose to ask. However, no fees exceeding those posted may be charged.

Permanent Placements

Table 1 shows the "most usual" fees charged by the California private employment agencies in 1940. Percentages are translated into dollars and cents. The "most usual" rate is the modal rate, that is, the rate charged by the largest single number of agencies in a given classification and in a given locality.

It is obvious from this table that for positions with the same salary, teachers are charged the most substantial fees. For positions of $125 per month they are most likely to pay $150 in San Francisco, $75 in Los Angeles, and from $41.67 to $105 in the remainder of the State.

In table 2 the minimum and maximum fees for permanent placement are reported for the two principal cities of the State and for the remainder of California. It will be noted that the San Francisco rates for the various fields of employment here listed are considerably higher than those in other localities.

[1] California. Department of Industrial Relations. Division of Labor Statistics and Law Enforcement. Fees Charged by Private Employment Agencies in California, by M. I. Gershenson, principal statistician. San Francisco, 1940.

TABLE 1.—*Most Usual Fees Charged for Permanent Placements at Specified Salaries, by Field of Employment and Location of Agency, California, 1940*

Field of employment	Location of agency	Monthly salary of—			
		$50	$80	$125	$200
Commercial [1]	San Francisco	$15.00	$24.00	$37.50	$60.00
	Los Angeles	[2] 12.50 [2] 16.67	26.67	41.67	100.00
	Remainder of State	12.50	20.00	41.67	80.00
Domestic, hotel and restaurant	San Francisco	5.00	8.00	12.50	20.00
	Los Angeles [3]	5.00 7.50	8.00 12.00	12.50 18.75	20.00 30.00
	Remainder of State	5.00	8.00	12.50	20.00
Nurses	San Francisco	15.00	24.00	37.50	60.00
	Los Angeles	12.50	26.67	41.67	100.00
	Remainder of State	5.00	8.00	12.50	20.00
Teachers [3]	San Francisco	60.00	96.00	150.00	240.00
	Los Angeles	30.00	48.00	75.00	120.00
	Remainder of State	(4)	(4)	(4)	(4)
Miscellaneous	San Francisco	5.00	8.00	12.50	20.00
	Los Angeles [3]	5.00 7.50	8.00 12.00	12.50 18.75	20.00 30.00
	Remainder of State	5.00	8.00	12.50	20.00

[1] In cases where the schedules quoted two or more rates depending upon the time of payment, the rate charged for payment in 30 days was used.
[2] Two rates tend to predominate.
[3] The fees, quoted as a percentage of a yearly salary on the schedule, are converted to a percentage of 1 month's salary for a 12-month year.
[4] There is no "most usual fee;" each agency schedules a different rate.

TABLE 2.—*Range of Fees Charged for Permanent Placements at Specified Salaries, California, 1940*

Field of employment	Location of agency	Fees for placement at monthly salaries of—			
		$50	$80	$125	$200
Commercial	San Francisco	$10.00–$25.00	$16.00–$40.00	$25.00–$62.50	$40.00–$100.00
	Los Angeles	5.00– 16.67	8.00– 28.00	12.50– 43.75	20.00– 120.00
	Remainder of State	5.00– 19.00	8.00– 30.40	12.50– 47.50	20.00– 80.00
Domestic, hotel and restaurant.	San Francisco	5.00– 10.00	8.00– 16.00	12.50– 25.00	20.00– 40.00
	Los Angeles	2.50– 12.50	4.00– 26.67	6.25– 41.67	10.00– 100.00
	Remainder of State	4.00– 12.50	6.40– 20.00	10.00– 31.25	16.00– 50.00
Nurses	San Francisco	12.50– 15.00	20.00– 24.00	37.50– 41.67	60.00– 100.00
	Los Angeles	10.00– 16.67	16.00– 28.00	25.00– 50.00	50.00– 100.00
	Remainder of State	2.50– 12.50	4.00– 28.00	6.25– 43.75	10.00– 100.00
Teachers [1]	San Francisco	60.00– 60.00	96.00– 96.00	150.00–150.00	240.00– 240.00
	Los Angeles	30.00– 30.00	48.00– 48.00	75.00– 75.00	120.00– 120.00
	Remainder of State	12.50– 42.00	20.00– 67.20	41.67–105.00	66.67– 168.00
Miscellaneous	San Francisco	5.00– 9.00	8.00– 14.40	12.50– 22.50	20.00– 36.00
	Los Angeles	4.00– 12.50	6.40– 20.00	10.00– 31.25	16.00– 50.00
	Remainder of State	2.50– 10.00	4.00– 20.00	6.25– 41.67	10.00– 100.00

[1] The fees, quoted as a percentage of a yearly salary on the schedules, are converted to a percentage of 1 month's salary for a 12-month year.

Temporary Placements

In over four-fifths of the 224 schedules analyzed which include a separate rate for temporary placements, the fee fixed is 10 percent of the total earnings in the temporary employment. A few commercial

agencies ask higher rates and also some hotel and restaurant, domestic, and nurses' agencies. However, the number of exceptions to the 10 percent fee is small.

Most of the schedules stipulate that the rate for a temporary job shall not exceed that for a permanent job paying the same salary.

IMMIGRATION TO CANADA, 1940

THE number of immigrants entering Canada in 1940 was 11,324, or 33.4 percent less than in the preceding year, according to a recent statistical statement of the Immigration Branch of the Dominion Department of Mines and Resources.[1]

Immigrants to Canada in 1940 from the British Isles totaled 3,021—a decline of 14.8 percent from the previous 12 months. From the United States there were 7,134 immigrants, representing an increase of 26.3 percent over 1939.

The second largest decrease in the number of immigrants entering Canada during 1940 compared with 1939, took place in the group classified as Northern European races, there only being 339 from this source during the year compared with 1,957 in the previous year. As would be expected, the largest decrease within this group was the German, there only being 119 from that country in 1940 compared with 1,071 in 1939.

The heaviest decrease in numbers occurred in the group designated "other races." In 1940 only 830 persons thus classified entered Canada, the number in 1939 being 5,844.

The sex and occupational distribution of the 11,324 immigrants in 1940 was as follows:

Number of Immigrants to Canada, 1940, by Sex, Occupational Class, and Destination

Sex, occupational class, and destination	Number	Sex, occupational class, and destination	Number
Sex:		Occupational class—Continued.	
Men	3,939	Domestic service: Females—	
Women	4,517	18 years and over	523
Children under 18	2,868	Under 18 years	70
Occupational class:		Other classes:	
Farming:		Men	1,637
Men	435	Women	3,155
Women	173	Children	2,201
Children	174	Destination:	
Laboring:		Nova Scotia	1,188
Men	531	New Brunswick	407
Women	59	Prince Edward Island	47
Children	70	Quebec	2,556
Mechanics:		Ontario	4,447
Men	715	Manitoba	314
Women	239	Saskatchewan	250
Children	158	Alberta	458
Trade:		British Columbia	1,645
Men	588	Yukon Territory	8
Women	363	Northwest Territories	4
Children	195		
Mining:			
Men	33		
Women	5		
Children	----		

[1] Canadian Labor Gazette (Ottawa), March 1941.

Youth in Industry

EIGHT YEARS OF CCC OPERATIONS, 1933 TO 1941

IN EIGHT years of operation—from April 1933 to April 1941—some 2½ million men have served in the Civilian Conservation Corps. Of these enrollees over 2,400,000 were young men and 145,000 were war veterans. This organization was established by Act of Congress in the spring of 1933 to provide employment, vocational training, and educational opportunities for jobless youths; to make it possible for young men enrolled in the CCC to give financial aid to their dependent families; and "to advance a Nation-wide conservation program on forest, park, and farm lands."

The CCC was an independent Government agency until July 1, 1939, when it was made a unit of the Federal Security Agency established under the Reorganization Act of that year.

The general objectives of the Corps have not changed since its creation, but today the parts of the program which are related to national defense are being more strongly emphasized.

The present article is based on the latest published reports of the CCC, remarks by Representative Jennings Randolph in the Congressional Record of April 3, 1941, and unpublished data supplied by the Corps.

Selection of Enrollees

The office of the CCC Director has the responsibility of selecting junior enrollees. The immediate supervision of the activities of State selection agencies is the duty of a special assistant to the Director. Through these State agencies (which are State public-welfare services already in operation) the selection of junior enrollees is made in each State. "Uniform national standards of eligibility, approved by the Director, provide the basis upon which all selections are made. The State selecting agency in turn is authorized to delegate responsibility for receiving applications and making individual selections to its local welfare offices." More than 4,500 local agents of the Corps select eligible youths in their respective communities for CCC enrollment. This work of State and local welfare personnel is voluntary and is not paid for from the funds of the Corps. The selection of members of the CCC war veterans' contingent is made through the local and regional facilities of the Veterans' Administration.

Eligibility and other Enrollment Regulations

To be eligible for enrollment in the CCC a man must be—

1. A citizen of the United States.
2. Between the ages of 17 and 23.
3. Unmarried.
4. Unemployed and in need of employment.
5. Not under conviction for crime or on probation or parole.
6. Willing to make an allotment, if he has dependents.
7. In good physical condition and with no history of mental derangement; of good character, with stability of purpose and a desire for work experience and self-improvement.

No age or marital restrictions are provided for war veterans.

If the applicant is between 17 and 23 years of age he may apply for enrollment at the nearest public welfare office. If he is a war veteran, application should be made at the nearest regional facility of the Veterans' Administration. Applications may be made at any period of the year. Actual selections and enrollments are made in January, February, April, May, July, August, October, and November in numbers adequate to fill camp vacancies.

During the last year the requirement for eligibility "unemployed and in need of employment" has been interpreted to include young men who were jobless and needed employment "although their families were not necessarily in financial distress."

A man enrolls for 6 months. Only under unusual circumstances or when offered permanent employment is an enrollee discharged before the close of the 6-month term.

After the completion of a full 6-month enrollment the enrollee may, if he desires and his work has been satisfactory, re-enroll at his camp. If he does not wish to do so he may be honorably discharged and given return transportation to his home or to the place he selects, whichever is nearest to his camp.

The maximum service period for juniors is 2 years. However, the following 10 enrollee positions in each camp are exempted by law from maximum age and length of service restrictions: Five enrollees selected by the technical service in the camp "as project assistants, work as subforemen, or specialists on the conservation work project. Five other enrollees are assigned to the camp administrative staff—2 cooks, storekeeper, mess steward, and senior leader."

Number of Camps and Enrollees [1]

The camps for juniors and war veterans number 1,500; in addition there are about 75 on Indian reservations for Indian enrollees. These camps are situated in every State, the District of Columbia, Alaska,

[1] Action by Congress on appropriation bills fixing the number of enrollees to be maintained during the fiscal year 1941–42 had not been completed when this article was prepared.

Puerto Rico, the Virgin Islands, and Hawaii. The enrollees in Territorial camps are selected from the Territory in which they live.

Each camp is constructed to house 200 enrollees. Juniors and war veterans live in separate camps.

The authorized strength of the CCC is 300,000 men, of whom not over 30,000 may be war veterans. An additional enrollment of not more than 10,000 Indians and 5,000 enrollees in the Territories is authorized.

As stated above, in the 8 years (April 1933 to April 1, 1941) over 2,400,000 young men and 145,000 war veterans have served in the camps of the CCC. Each enrollee is counted only once without regard to the number of times he is reselected.

Over 1,640,000, including some 280,000 enrollees of the CCC and 1,360,000 of their dependents, are helped each month by the organization.

Character of Work

More than 150 major types of work are carried on by the Corps. These may be grouped under the following general heads: Soil conservation, forest protection and improvement, reforestation, recreational developments, range rehabilitation, aid to wildlife, flood control, reclamation, and emergency rescue work.

The establishment of the CCC has for the first time made available to Federal, State, and local governments and private landowners an adequate supply of manpower and funds with which to carry forward urgently needed programs for conservation.

By planting hundreds of millions of trees, by strengthening the forest-protection facilities in our forests and parks, by carrying out ambitious erosion-control programs, by developing new recreational facilities in our parks, and by demonstrating to the Nation that our forests and our topsoils can be saved by prompt action, the Corps has awakened the whole country to the need for continuance through the years of a carefully planned but comprehensive and Nation-wide program for the protection and development of our natural resources. Through its efforts, the CCC has added millions of dollars to the Nation's wealth.

The accompanying table shows some of the work accomplished by the Corps during the 8 years of its operations.

At least 75 percent of the general run of CCC field work is of a type which engineer troops perform in peace or war. Enrollees also receive training in various duties, performed by men in the Quartermaster Corps, and by industrial and agricultural workers behind the lines, so that no important change was required in the job and job-training features of the Corps program to make it a definite contribution to the preparations for national defense.

Selected Work Accomplishments of the CCC, April 1933 to April 1, 1941 [1]

Type of work	Unit	New work	Maintenance
Bridges	Number	45,142	15,788
Impounding and large diversion dams	do	6,837	2,928
Fences	Rods	24,969,767	6,865,244
Telephone lines	Miles	84,737	243,461
Airplane landing fields	Number	68	65
Truck trails or minor roads	Miles	118,492	509,137
Erosion-control check dams	Linear feet	5,858,301	175,942
Terrace-channel construction	do	41,508,641	2,195,320
Terrace-outlet structures	Number	396,295	26,661
Excavation, channels, canals, and ditches	Cubic yards	26,237,140	68,586,310
Field planting or seeding trees	Acres	2,060,403	207,983
Forest-stand improvement	do	3,879,280	16,755
Fighting forest fires	Man-days	6,273,220	
Fire-hazard reduction (other than roadside or trailside)	Acres	2,070,977	
Fire prevention	Man-days	688,262	1,412
Tree and plant disease control	Acres	7,963,249	718,431
Tree insect pest control	do	12,693,331	173,880
Public camp-ground development	do	49,255	37,282
Stocking fish	Number	931,216,114	
Eradication of poisonous weeds or exotic plants	Acres	864,967	
Insect pest control	do	5,508,509	47,392
Rodent and predatory animal control	do	3,851,234	715,648
Timber estimating	do	34,948,531	91,802

[1] Figures for February and March 1941, estimated.

There was, however, a revision of the academic- and vocational-training activities in order that the greatest emphasis might be placed on those phases which contribute the most to national defense. Instructions were sent to all camps directing officials in charge of these activities to see that the training programs were so conducted.

A daily calisthenics drill was instituted which, coupled with the regular work program and the discipline of barracks life, conditions them for whatever service they may be called upon to render to their country. All of the enrollees are required to take the standard Red Cross 20-hour first-aid course, which means that a half million men will have learned proper basic methods of caring for wounded or sick persons.

Remuneration

A CCC enrollee is paid $30 per month, including $8 in cash and an allotment of $15 to his dependents. The remaining $7 is deposited to his credit each month and is held until he is discharged, when the total amount is paid over to him.[2] If he is without dependents he is required to deposit $22 per month until he is discharged, at which time he receives the whole amount he had deposited. With the exception of leaders and assistant leaders, all enrollees receive the same amount in cash per month—$8.

It is estimated that the real monthly wages of CCC boys are $66.25, including cash allowances, subsistence, shelter, clothing, personal supplies, education, welfare, transportation, and medical care.

Not over 10 percent of the enrollees of each company may be appointed assistant leaders and be paid $36 per month. Not over 6 percent may be appointed leaders, receiving $45. Both leaders and assistant leaders are required to allot $15 for dependents and to

[2] Previous to January 1, 1941, the enrollee sent $22 of his pay to dependents. The savings scheme is a recent innovation.

deposit $7 of their cash earnings in a special savings fund. These savings are turned over to them in a lump sum when they are discharged from the Corps.

Upon entering the CCC each enrollee is supplied with complete clothing outfits. He is furnished with suitable clothes for both work and dress occasions. His uniform for winter is spruce green with a woolen olive drab shirt, black necktie, and black shoes. The summer dress uniform is khaki.

All enrollees are provided, if needed, with adequate dental, medical, and hospital care. The United States compensation law, covering Federal employees, has been amended to include enrollees who incur certain types of injuries in the line of duty.

Cost of Maintaining an Enrollee

The Corps estimates that it costs $500 to maintain a young enrollee for 6 months, $320 being allocated to the operation of the camp, $90 to the youth's dependents, $48 to the boy in cash, and $42 to his savings fund.

Educational and Training Opportunities

Each camp maintains separate school buildings and workshops for the training of enrollees after the duties of the day are accomplished. Enrollees are also trained on the job, while at work. Each camp has an educational adviser who, under the camp commander's direction, supervises a study program for interested enrollees. All the officials of the camp help to carry out the educational program. Health, first aid, safety, and citizenship training is given to all boys in the Corps.

Approximately 91 percent of the enrollees take advantage of the camp educational opportunities. The only study in leisure time that is actually required of the enrollees is for those who cannot read or write. These campers are obliged to attend classes for the elimination of illiteracy.

Since the Corps' establishment, over 87,000 have been taught to read or write. Many of the enrollees continue their studies during their service.

The work supervisor gives training on the job to the men and boys who are actually at work on the various jobs undertaken by the CCC. The Corps reports that the supervisors see not only that the task is accomplished but that the men know how it should be done and the reasons for doing it, so that every enrollee becomes more skillful, not only on the particular work at hand but on many related jobs. In illustration, ditch digging affords primary instruction in surveying, drainage, hydraulics, and sanitation.

Approximately 50 percent of the enrollees supplement their training on the job by class attendance in CCC vocational shops or in neighboring trade schools where training may be had after the regular camp working day is over. In the early spring of 1941, 26,000[3] enrollees were following special national defense vocational courses in cooperation with State educational departments.

An allotment of $10,000,000 has been made to the United States Office of Education for training rural youth for national defense. However, in certain rural communities trade schools have not been established. On the other hand, numerous CCC camps have well-equipped training shops and educational buildings. In accordance with requests from State educational departments the Director of the CCC has ruled that the youth in such communities may avail themselves of the classes in the camp shops and schools.

Opportunities for vocational training in the Corps may be classified as follows:

1. Training received while at work, such as truck and tractor driving, blasting, and road bridge building.
2. Related training—given in camp classrooms after work hours, such as radio, photography, theory of surveying, forestry, soil-conservation work, public-grounds development, etc.
3. Camp shops—here are taught such things as welding, woodworking, motor repair, etc.
4. Nearby schools—these offer various vocational training opportunities for CCC enrollees.
5. CCC central repair shops—a limited number of enrollees who have shown special aptitudes are chosen for training in motor mechanics at these shops throughout the country, where major repair and overhaul of all CCC motorized equipment is done.

The annual distribution of the enrollees receiving training in various specified occupations is reported below:

	Number
Operators of trucks, tractors, power shovels, draglines, etc., and other heavy equipment	60,000
Road-construction workers	60,000
Building-construction men, including workers in concrete, practical carpenters, stonemasons, painters, electricians, and plumbers, etc.	25,000
Telephone-line construction workers	10,000
Operators of air hammers, air compressors	8,100
Blasters and powdermen	7,900
Bridge builders and bridge-construction workers	7,500
Semiskilled mechanics	500
Maintenance mechanics and mechanics' helpers	5,000
Practical welders	1,500
Practical blacksmiths	1,500
Surveyors, map makers, map readers, and draftsmen	3,000
Axmen, sawyers, saw filers, and sawmill men	12,135
Operators of crushers	975

[3] 35,000 as of May 31, 1941.

	Number
Pipe-line construction workmen	5, 900
Quarry workers	6, 200
Clerks	3, 200
Warehousemen	3, 000
Cooks	4, 500
Bakers	2, 000
Mess stewards	1, 500
Supply stewards	1, 500
Hospital and infirmary attendants	3, 000
Radio operators	1, 600

Cooperation of Educational Institutions in School Year 1940–41

The Director of the CCC announced to the press on January 13, 1941, that 126 colleges and universities were directly assisting CCC enrollees in the scholastic year 1940–41. This aid, which includes scholarships, remission of fees, part-time jobs, and similar types of assistance, is making it possible for 303 enrollees to continue their training in the higher educational institutions. The great majority of these enrollees were honorably discharged from the CCC in order that they might give all their time to their studies.

Over 250 high schools and vocational-training schools are also cooperating with the educational officials of the Corps not only by providing classroom and shop instruction in the schools but also by supplying instructors for night classes in the camps. At the beginning of 1941 over 7,500 enrollees were receiving instruction in schools near the camps.

The departments of education in 41 States and the District of Columbia are now granting grade, high-school, and college credits for work done in camps.

Assistance in Placement of Enrollees in Private Jobs

The CCC aids both directly and indirectly in placing its men and boys. According to the CCC, the average enrollee while in camp improves his education and learns proper methods of work and habits of industry and cooperation. He is also taught how to make application for a job.

Officials of the Corps and the State CCC selecting agencies cooperate with public employment offices, chambers of commerce, and employment managers of business establishments in placing CCC boys in permanent jobs.

Life in the Camps

The men rise at 6 a. m., take calisthenics for a quarter of an hour every morning except Sundays and holidays, breakfast at 6:30, police their barracks and camp, and begin work at 8. Their working day

closes at 4 p. m. Free time follows. After supper they may study, read, or follow other activities of their own choosing until 10 p. m.—their bedtime.

The camps are provided with equipment for sports and games, library books and magazines, and materials for study. Among the many recreational activities of the enrollees are hiking, fishing, swimming, baseball, boxing, and glee clubs.

The CCC religious activities are supervised by the Office of the Chief of Chaplains of the United States Army. Catholic, Protestant, and Jewish clergymen conduct religious services in the camps and meet other religious requirements when necessary. Volunteer clergymen are also brought to the camps when it is considered necessary or advisable. These men receive no remuneration except their transportation to and from the camps and board and lodging while at the camp.

Participation of Negro Youth

In 8 years, 1933–41, 350,000 Negroes have served in the CCC. According to a recent report of the Corps the average gain in weight of these young men from their enrollment has generally ranged from 7 to 12 pounds.

In the spring of 1941, 30,000 colored youth and war veterans, constituting about one-tenth of the total enrollment, were taking active part in the program of the Corps.

The aggregate monthly allotment made by the young men to their parents and dependents at home was about $700,000.

Personnel.—The colored personnel engaged in the work of the camps included, on April 1, 1941, about 2,000 project assistants, leaders, and assistant leaders; approximately 600 cooks; 400 typists; 151 college-trained educational advisers; 50 United States Army Reserve Corps chaplains and local ministers; 50 camp commanders and subalterns; 1 camp superintendent, and 3 other graduate engineers, who are in charge of the Corps project at Gettysburg National Military Park, Pennsylvania; and several technical engineers on camp duty.

Instruction.—Over 15,000 Negro enrollees have been taught to read and write. Most of the colored enrollees during their leisure hours regularly attend the academic, vocational, and job-training classes held in the camps. Among the institutions that have granted scholarships and fellowships to CCC enrollees are: Howard University; Wilberforce University; Tuskegee Institute; Hampton Institute, Florida Agricultural and Mechanical College, Tallahassee; and Tennessee Agricultural and Industrial State Teachers College, Nashville.

In the 8 years, 1933–41, approximately 15,000 colored enrollees have completed first-aid courses through the cooperation of the CCC and the National Red Cross.

Over 90,000 books have been furnished to libraries in Negro camps. Camp recreation halls also are supplied with current magazines and daily and weekly newspapers.

Administration

The program of the CCC is administered by a Director who is appointed by the President, by and with the advice and consent of the Senate. He is charged with the coordination and direction of all the operations of the CCC. Three Government departments and one agency cooperate with the Director in enrolling men, administering the camps, and in carrying forward work programs. The quotas of men to be enrolled from each State are approved by the Director, also all locations for Corps camps and all regulations issued with reference to CCC administration and operation.

The Secretaries of War, of the Interior, and of Agriculture, and the Administrator of Veterans' Affairs each appoint a representative to the CCC Director's Advisory Council. Upon the request of the Director, the council members confer with him and under his direction assist him in conducting the Corps program.

The War Department is responsible for the physical examination, enrollment, equipping, and conditioning of the enrollees. It provides transportation of the enrollees to camp and to their homes or place of enrollment after their term in camp is ended. It is responsible for administering the CCC camps—providing food, clothing, housing, medical and dental care, as well as education for the boys while they are in camp. Through the Finance Officer of the War Department, who acts as the Fiscal Agent of the CCC, the enrollees and their dependents to whom they make allotments are paid.

The Department of the Interior and the Department of Agriculture designate, plan, and supervise the work projects carried on under the supervision of experienced technicians of the following agencies of these two Departments: National Park Service, Grazing Service, Bureau of Reclamation, Fish and Wildlife Service, General Land Office, and Office of Indian Affairs, of the Interior Department, and the United States Forest Service, Soil Conservation Service, Bureau of Entomology and Plant Quarantine, Bureau of Plant Industry, Bureau of Animal Industry, and the Beltsville Research Center, of the Department of Agriculture.

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Social Security

VOLUNTARY DISABILITY INSURANCE IN THE UNITED STATES

IN view of the present interest in protection against the economic hazards of sickness and disability, a survey of existing methods of providing against these hazards was made by a member of the staff of the Bureau of Research and Statistics in the Social Security Board. The report of this survey is limited to consideration of the cash benefits provided through commercial insurance and through the cooperative insurance offered by fraternal and mutual-benefit associations, and excludes medical-care or hospital-service plans.[1]

The payment of cash benefits for disability, aside from the benefits payable under workmen's compensation, has been provided for in this country almost entirely by voluntary insurance, and the risks covered by insurance in this report are the losses and expenses arising from sickness and accident. The risk of death is usually not covered in commercial insurance policies covering sickness, since this risk lies in the field of life insurance. In general, in commercial insurance, disability lasting less than 6 months is classed as temporary, and continuous disability lasting longer than 6 months, as permanent. However, the length of the waiting period and the duration of the period for which benefits are paid are of more importance in determining whether the risk covered is temporary or permanent, since policies which pay benefits for 6 months' or a year's duration with no waiting period or one of only 1 or 2 weeks may be regarded as compensating for temporary disability, while those which require a long waiting period may be considered as compensating for permanent disability. Policies providing payments for disability from disease usually require that the individual be totally disabled, but those covering disability from accident grant benefits for partial as well as total disability.

Commercial Insurance

Commercial insurance, which is more highly developed than cooperative insurance, provides both individual and group contracts, and different types of policies have been developed to fit the circum-

[1] Cash Benefits under Voluntary Disability Insurance. By Elizabeth L. Otey. Washington, Bureau of Research and Statistics, Social Security Board, 1940.

stances of different purchasers. Industrial and group insurance are the types of insurance specially provided by commercial companies for wage earners. Under the first plan the contract is individual, while under the group plan the employer insures employees in his establishment as a group and deducts the wage earner's share of the premium from his pay or in some cases pays the entire premium.

Under the commercial policies sickness insurance has not been developed as a separate branch of insurance but has usually been a part of life- or accident-insurance policies. There are two types of policies providing general protection against temporary disability—general accident and health policies and noncancelable aggregate-indemnity accident and health policies. The first insures against all kinds of sickness and accidents, regardless of their nature and origin, but policies are limited to persons not over 55 years of age, although in some instances they are renewable to age 60. Also, policies are issued only to persons regularly employed and the benefits are related to the person's income. Usually no medical examination is required, but persons with specific defects and infirmities, those engaged in extra-hazardous occupations, etc., are not accepted. In the past decade a medical reimbursement policy has been developed which repays the policyholder the amount actually spent for surgical, hospital, medical, and nursing services, up to a fixed limit, usually 20 times the weekly indemnity. This development is said to indicate a greater realization by insurance companies of the cost of medical and hospital care in accidents and ill health.

Cancelable policies, which have to be renewed every year, have the disadvantage that the policyholder may be unable to obtain continued protection when he needs it most, while the insurance company runs the risk of a high lapse rate. To meet these disadvantages the insurance companies introduced noncancelable policies in 1915, which guarantee the policyholder the right to renew insurance up to age 60 or 65. These policies require a rigid medical examination and accept only the best occupational risks. There are two principal types of these policies—aggregate indemnity which provides for temporary disability, and life indemnity which covers both temporary and permanent disability.

Commercial disability insurance in all its forms developed rapidly during the 1920's, but increases in losses from this type of insurance during the depression have resulted in some types of policies being practically given up, and there has been a constant trend toward more careful underwriting and restriction of benefits. The principal reasons for the limitation of this type of inurancse in the commercial field have been the expense, adverse selection of risks, and difficulty of claims administration.

INDUSTRIAL LIFE INSURANCE

Industrial life insurance has been developed for low-income families.[2] Disability benefits are limited, however, to loss of hands or feet and loss of sight of both eyes. This has resulted from the facts that the policies are for small amounts and the expenses connected with selling and administering this form of insurance are relatively high. The report concludes that the permanent and total disability benefit of industrial life insurance, since it is confined to dismemberment and loss of sight, offers too limited coverage for general usefulness, and that to be effective, industrial health insurance should have a broad scope and provide adequate payment.

GROUP INSURANCE

Group insurance, first introduced in 1911, was for many years straight life insurance, but as it has been developed, this form of insurance is now of five types—life, accident and health, hospitalization, accidental death and dismemberment, and annuities. Prior to 1932, these policies provided that in the event of permanent disability before age 60, the face value of the life-insurance certificate should be paid in a lump sum or in installments over a period of several years, no death benefit being paid in such cases. In policies written between 1932 and 1938 the disability benefit was a waiver of premiums for 1 year. In 1938 the provisions were changed in most policies to provide for a waiver of premiums during the period of total and permanent disability, for employees under 60 years of age if they submit proof at least once a year of continuance of disability; this of course protects the life insurance of the employee during total and permanent disability, but provides nothing during temporary disability. Commercial group accident and health insurance does provide for temporary disability, but the benefits are commonly limited to 13 benefit weeks after a 7-day waiting period. To date this form of insurance has reached only a relatively small number of industrial workers, and because of the inherent limitations it appears unlikely that it will insure any substantial part of those who need sickness protection.

Cooperative Insurance

In the United States cooperative insurance has been developed by fraternal societies, employee mutual benefit associations, and trade-union benefit associations.[3] The fraternal societies primarily provide life insurance, and use agents on a commission basis to increase their

[2] For a discussion of industrial insurance see Monthly Labor Review, December 1940, p. 1335.

[3] Such insurance is also provided by cooperative and mutual insurance associations, but these are not included in the report under review.

membership. Employee and trade-union sickness-benefit associations are supported by monthly contributions or membership dues, and pay weekly benefits. In both cases management is kept in the hands of the members, but the employee associations usually receive some form of assistance from the employer, whereas the trade-union associations are self-supporting and are not connected with the employer or the plant.

The insurance risks covered by fraternal societies include death, old age, total and permanent disability, temporary sickness, and accidents—although not all of the societies offer all forms of protection. Only a relatively small number of these associations provide sickness benefits, although they have shown great interest in the prevention of sickness. Some of the societies offer life-extension services and medical examinations to members holding certificates for $3,000 or more of life insurance. These societies have declined in importance as an instrument of insurance in recent decades.

The disability benefits provided for members of mutual benefit associations are primarily to insure the workers against the risk of temporary sickness, the benefit periods ranging from 5 weeks to 2 years, although about half of the associations pay for 13 weeks or less. In most cases only cash benefits for disability are paid, but interest in medical benefits is increasing. A recent study of 251 associations showed that more than one-third provided hospital benefits, free medicines, or the services of a physician, surgeon, or nurse.

Prior to the organization of national and international trade-unions, local unions paid sickness and death benefits, and many of the national unions formed later established funds to provide for these benefits. The popularity of death benefits has been maintained through the years, but the number of national sickness-benefit associations is smaller now than formerly, although union interest in the health of members has increased, and today concern for protection against sickness covers many types of activities.

In summing up this section of the report, it is stated that it is apparent, from the relatively small number of fraternal societies that provide sickness insurance, that this question is not one of major interest to these associations. Also, the small coverage in mutual-benefit associations shows how little use has been made of this voluntary method of insurance; among trade-unions, likewise, protection against sickness and disability represents a minor part of the beneficial activities of the organizations.

General Conclusions

There is no accurate information as to the number of persons in the United States who are insured against disability through voluntary cash-benefit plans, although it is considered safe to say that only a

small fraction of the population is adequately protected. Even for persons holding some type of disability insurance, the protection is fragmentary and inadequate.

It is estimated that approximately $203,100,000 was paid out in cash-disability benefits in 1935, representing some 5 percent of the total losses through sickness, i. e., the Nation's estimated annual medical bill of 3 billion dollars and the approximate loss of 1 billion dollars in wages. Of the total estimated cash benefits under these voluntary plans, $178,100,000 was paid under commercial insurance plans, of which $144,500,000 was chiefly to persons with moderate or comfortable incomes, and $33,600,000, chiefly to wage earners. Benefits under the various cooperative insurance systems amounted to $25,000,000,[4] of which $7,000,000 represented payments by fraternal societies chiefly to persons of modest income and to a few wage earners, and $18,000,000 were payments made chiefly to wage earners by employee mutual sickness-benefit associations and trade-union sickness and disability benefit associations.

The effect of disabling illness is most severe on families and individuals of small means, but in spite of their greater need for protection, the annual disability benefits received by wage earners amount to only about 41 percent of the amount paid to the group of beneficiaries in better circumstances. The study shows that in proportion to their numbers, persons at the higher income levels make greater use of voluntary sickness insurance than do members of the industrial population.

An approximate estimate of the number of wage earners who are insured to some extent against temporary and permanent disability by the various forms of cash-benefit insurance covered in the report is shown in the following statement. These numbers should not be added, as there may be numerous duplications of membership in the different forms of insurance.

	Wage earners insured
Temporary disability:	
Employee mutual-benefit associations	1, 500, 000
Group accident and health	2, 200, 000
Industrial life, accident, and sickness	3, 000, 000 to 3, 500, 000
Permanent disability:	
Group life (policies issued prior to 1932)	4, 500, 000
Group accidental death and dismemberment	700, 000
Industrial life (dismemberment and blindness)	16, 000, 000
Either temporary or permanent disability:	
Fraternal societies	500, 000
Trade-unions	1, 200, 000 to 1, 500, 000

[4] This figure does not include benefits paid by cooperative and mutual insurance associations which are not covered in the report under review.

In summing up the results of the study the report states:

Voluntary disability insurance has had an undisputed field in the United States, with surprisingly meager results. Among those in need of protection the number of persons insured is comparatively small and the extent and amount of the protection generally incommensurate with the risk. The experience of commercial and cooperative disability insurance indicates that on the whole the particular risk of disability is not suited to voluntary methods because:

(1) The number of persons who insure voluntarily is small; contrast the number who have some sort of protection against disability with the number who hold over 124 million life-insurance policies.

(2) The insurance of relatively few persons furnishes a narrow distribution of risks and consequently limits benefits. The protection offered becomes of necessity too restricted to be useful or important socially. Because of small numbers and poor risks, the policyholders are grouped according to their rate of morbidity and must pay premiums graded accordingly. Wage earners, who particularly need protection by reason of their high morbidity, must pay more for health insurance, contrary to the basic principle of social insurance that special risks are merged in the general distribution of all risks.

PLACEMENT WORK OF PUBLIC EMPLOYMENT SERVICES, MARCH 1941 [1]

THE greater number of working days in March was almost entirely responsible for raising placements 9 percent from February to 376,000 in March; on a daily-rate basis, placements were 5 percent lower than in February. Complete placements made during the month, however, were 55 percent higher than in March 1940 and 48 percent higher than in March 1939.

As in February, approximately two-thirds of the total jobs filled were expected to last longer than a month; in March 1940, only slightly more than half of the placements were of this duration. All but 11 States reported increased placements over February. Outstanding gains were shown for Idaho, Maine, Mississippi, Montana, Nevada, and North Dakota. Declines in some States reflected the curtailment of large-scale placements on military construction. Thus far during 1941 the public employment offices have filled 416,000 more jobs than in January–March 1940, a gain of 62 percent. Outstanding increases—from 1 to 3 times over placements made in the first 3 months of 1940—were noted in Arkansas, Florida, Kansas, Massachusetts, Missouri, North Carolina, Rhode Island, South Carolina, Tennessee, Virginia, and Wyoming. Of the nearly 1,100,000 jobs filled in the first quarter of 1941, 67 percent were expected to last longer than a month, in contrast to only 54 percent in the same period of 1940. Supplementary placements numbered 53,000, a decline of 21 percent from February but 75 percent higher than in March 1940.

[1] Prepared by Research and Statistics Division, Bureau of Employment Security, Social Security Board.

These are placements in which the public employment office was not wholly responsible for filling the job.

Of the total complete placements made by public employment offices, 230,000 were filled by men and 146,000 by women. Placements of men were three-fourths greater than those made in March 1940, while placements of women were a third higher. The increase for men in March was considerably smaller than in February 1941 and reflected mainly the curtailment of large-scale placements on military construction projects; the increase for women was equivalent to that shown in February. Two-thirds of the jobs filled by men and more than half of the jobs filled by women were expected to last longer than a month. Placements of men were higher than in March 1940 in all but 6 States and for women in all but five. As in February, placements of women exceeded those of men in Delaware, the District of Columbia, Minnesota, New Jersey, New York, North Dakota, and Oklahoma.

TABLE 1.—*Summary of Placement Activities of Public Employment Services, March 1941*

[Data reported by State agencies, corrected to Apr. 24, 1941]

Activity	Number	Percent of change from—		
		February 1941	March 1940	March 1939
Total complete placements	376,302	+9.3	+54.6	+48.3
Regular	245,032	+2.8	+87.8	+64.3
Temporary	131,270	+23.7	+16.3	+25.5
Supplementary placements	53,124	−20.8	+75.3	+42.3
Total applications	1,627,551	+18.7	+20.5	+31.5
New applications	714,788	+17.1	+50.6	+42.9
Active file	5,166,491	+1.3	+2.8	−23.4

More than 1,600,000 applicants registered for jobs during March, an increase of 19 percent over February. New registrations increased 17.1 percent over February. Many of the new registrations, which comprised 44 percent of total applications this month, probably reflect to a certain extent the initial results of the Nation-wide campaign to induce all available workers not already registered to file an application at their local employment offices. The number of registrants actively seeking work on March 31 totaled 5,200,000, about the same number as at the end of February. Despite a 3-percent increase over March 1940 for the country as a whole, the number of job seekers actively seeking work through public employment offices at the end of March 1941 was lower in 28 States. Reductions of 25 percent or more were reported by 8 widely scattered States. Of the States having greater numbers of registrants in March 1941 than in the same month of 1940, Florida, Illinois, and Louisiana showed the largest increases, ranging from 62 to 85 percent.

A total of 1,200,000 applications for work were filed by men, a 24-percent increase over March 1940, while the 453,000 filed by women represented an increase of about 13 percent. At the end of March, the active file of men was 2 percent greater than in March 1940, while woman registrants were 7 percent higher. Nevertheless, in 29 States the number of male job seekers registered in March 1941 was lower than in the same month of 1940, and woman registrants were fewer in 24 States.

TABLE 2.—*Summary of Placement Activities for Veterans, March 1941*

[Data reported by State agencies, corrected to Apr. 24, 1941]

Activity	Number	Percent of change from—		
		February 1941	March 1940	March 1939
Total complete placements	12,074	+8.5	+50.7	+2.8
Regular	6,752	+3.6	(1)	(1)
Temporary	5,322	+15.3	(1)	(1)
Total applications	60,014	+22.9	+25.4	−9.7
Active file	251,729	+5.4	+10.0	−30.2

[1] Total veteran placements by duration not reported prior to 1941.

TABLE 3.—*Activities of Public Employment Services, All Registrants, by States, March 1941*

[Data reported by State agencies, corrected to Apr. 24, 1941]

Social Security Board region and State	Complete placements						Supplementary placements	Applications received		Active file	
	March 1941				January–March 1941						
	Number	Percent of change from—		Regular (over 1 month)	Number	Per cent of change from January–March 1940		Total	New	As of Mar. 31, 1941	Percent of change from Mar. 31, 1940
		February 1941	March 1940								
Total	376,302	+9.3	+54.6	245,032	1,083,800	+62.3	53,124	1,627,551	714,788	5,166,491	+2.8
Region I:											
Connecticut	7,734	+6.4	+108.4	5,952	21,999	+93.0	123	22,424	8,118	50,012	−28.0
Maine	2,995	+51.6	+164.6	2,558	6,775	+83.0	30	13,754	4,091	36,681	−15.3
Massachusetts	7,418	+18.3	+160.9	6,175	19,795	+107.9	65	55,155	31,582	208,391	+31.9
New Hampshire	1,378	−20.1	+12.8	1,083	4,766	+4.7	197	6,696	1,549	18,850	−5.4
Rhode Island	1,924	+12.6	+215.4	1,569	5,336	+189.7	0	12,177	6,264	42,826	+8.7
Vermont	868	+14.5	+35.4	469	2,509	+34.8	8	3,016	1,048	12,020	−26.4
Region II:											
New York	38,119	+16.3	+80.3	21,394	104,757	+76.7	1,696	256,143	108,249	533,824	−9.8
Region III:											
Delaware	1,121	−9.4	+47.3	638	3,563	+60.1	13	3,548	1,142	11,203	−27.5
New Jersey	15,195	+33.8	+88.8	8,469	39,017	+53.0	61	54,866	22,980	202,966	−10.6
Pennsylvania	15,772	+15.8	+61.6	11,393	44,508	+57.1	866	123,104	53,599	385,108	+36.4
Region IV:											
Dist. of Columbia	4,936	+15.7	+54.1	2,445	14,174	+58.6	42	13,755	4,337	28,804	−28.2
Maryland	5,372	+22.5	+85.5	3,835	14,440	+77.4	6	24,448	9,709	53,483	−28.7
North Carolina	20,902	−29.4	+249.8	18,711	69,926	+333.2	5,122	32,850	14,370	93,628	+2.3
Virginia	10,811	+10.2	+195.0	8,785	27,877	+159.1	73	22,945	11,936	49,873	+7.4
West Virginia	3,496	+7.0	+50.9	2,412	9,436	+49.6	340	18,431	5,231	65,070	+2.7
Region V:											
Kentucky	2,588	+11.4	+22.3	1,529	8,387	+59.3	148	21,498	11,763	96,139	+7.1
Michigan	11,709	+22.6	+42.5	8,193	31,215	+38.2	193	78,149	30,874	174,731	−15.1
Ohio	19,054	+20.2	+55.0	11,491	51,857	+61.3	362	69,689	29,515	316,710	+15.7
Region VI:											
Illinois	19,733	+20.3	+68.3	13,189	53,171	+55.5	987	83,990	35,846	267,443	+61.5
Indiana	11,171	+40.0	+60.4	7,614	28,721	+56.0	715	34,533	19,719	184,963	+25.0
Wisconsin	7,468	+23.9	+43.1	4,651	20,306	+40.3	324	25,764	11,274	109,100	−14.2
Region VII:											
Alabama	3,162	+1.3	−16.5	2,281	10,055	+3.5	179	36,044	16,702	104,930	−6.0
Florida	5,364	−22.1	+91.6	3,587	23,340	+145.3	1,224	30,972	20,013	90,786	+85.3
Georgia	6,968	+7.4	−7.6	4,328	21,673	+12.1	100	28,484	16,184	116,447	−10.0
Mississippi	3,834	+69.6	−6.4	3,211	8,367	−8.0	93	17,793	7,130	58,444	+24.3
South Carolina	4,455	−26.8	+62.2	3,358	22,795	+197.3	125	12,391	6,528	45,257	+17.2
Tennessee	7,307	+8.6	+81.0	5,808	22,378	+105.7	1,539	23,295	16,328	125,387	+6.5
Region VIII:											
Iowa	6,922	+37.3	+51.2	4,185	16,838	+16.5	767	18,387	5,779	70,197	−15.8
Minnesota	4,357	+11.4	+26.2	2,647	12,287	+23.5	150	30,358	9,864	113,688	−22.7
Nebraska	2,176	+45.4	+12.2	1,372	5,245	+9.4	54	9,822	3,377	47,591	+16.2
North Dakota	1,645	+55.3	+37.4	936	4,122	+36.9	45	5,258	1,704	30,524	+2.3
South Dakota	985	+34.2	+15.2	481	2,613	+20.5	36	5,355	1,342	25,100	−12.4
Region IX:											
Arkansas	6,169	+30.1	+55.1	2,069	17,269	+114.4	1,267	15,678	8,408	41,038	−9.7
Kansas	5,900	+30.3	+79.9	3,151	16,259	+103.7	247	22,528	8,633	63,824	+2.3
Missouri	15,152	−11.8	+137.7	12,319	43,923	+160.8	567	47,470	21,195	190,446	+19.0
Oklahoma	3,646	+21.0	−18.6	1,838	9,556	−8.2	1,171	23,055	10,772	57,620	−34.9
Region X:											
Louisiana	5,870	−23.8	+54.2	4,690	18,773	+67.7	7,691	23,735	10,493	119,941	+72.5
New Mexico	1,151	−40.0	+15.2	865	4,082	+42.1	201	5,883	2,689	29,596	−14.3
Texas	26,563	−12.2	−6.5	11,856	96,769	+22.2	15,980	63,626	35,000	226,011	−6.0
Region XI:											
Arizona	3,155	+36.7	−4.3	2,072	7,979	−9.8	2,643	5,999	2,301	18,055	−24.8
Colorado	2,851	+43.5	+8.1	1,553	7,371	+6.2	105	16,914	5,655	61,884	+13.1
Idaho	2,186	+88.3	+30.7	1,217	4,450	+20.0	197	7,591	1,905	17,766	+36.3
Montana	1,162	+52.7	+14.9	853	2,607	+13.9	241	6,439	2,059	26,452	−10.7
Utah	1,385	+51.2	+106.1	759	3,752	+66.8	10	5,959	2,000	23,182	+2.6
Wyoming	814	−52.5	+62.8	485	4,274	+251.5	3	3,750	954	7,995	−21.6
Region XII:											
California	28,112	+27.6	+56.9	16,317	74,143	+55.6	3,346	130,746	55,430	409,583	−.9
Nevada	1,463	+54.3	+29.0	852	3,232	+20.1	125	2,745	1,302	5,783	−2.8
Oregon	6,959	+27.5	+58.9	5,137	17,938	+64.5	955	18,219	8,178	38,497	+15.6
Washington	5,509	+27.6	−10.3	3,308	14,749	−1.7	2,666	28,812	7,666	50,710	−45.9
Territories:											
Alaska	491	+2.5	+28.9	[258	1,391	+12.2	18	1,274	762	2,094	−24.5
Hawaii	825	−12.4	+8.0	684	3,035	+37.9	8	2,034	1,239	5,838	−29.2

TABLE 4.—*Activities of Public Employment Services, Veterans, by State, March 1941*

[Data reported by State agencies, corrected to Apr. 24, 1941]

Social Security Board region and State	Complete placements			Total applications received	Active file		
	Number	Percent of change[1] from—			As of Mar. 31, 1941	Percent of change from—	
		February 1941	March 1940			Feb. 28, 1941	Mar. 31, 1940
Total	12,074	+8.5	+50.7	69,014	251,729	+5.4	+10.0
Region I:							
Connecticut	297	+36.9	+185.6	740	2,440	−17.5	−33.6
Maine	129	+76.7		636	2,069	+7.6	−.8
Massachusetts	149	+13.7	+104.1	3,197	13,271	+9.1	+151.3
New Hampshire	76	+8.6		319	1,015	−2.7	+9.4
Rhode Island	61	+15.1		407	1,771	+21.6	+307.1
Vermont	41			135	600	+2.0	−19.7
Region II: New York	699	+31.6	+60.3	4,645	16,289	+.1	−10.4
Region III:							
Delaware	15			119	470	−1.9	−34.7
New Jersey	303	+54.6	+131.3	2,405	9,124	+10.3	+5.4
Pennsylvania	393	+27.2	+104.7	6,450	20,855	+4.1	+83.4
Region IV:							
District of Columbia	162	+32.8	+60.4	712	2,013	+7.5	−8.3
Maryland	206	+56.1	+44.0	812	1,850	−1.0	−43.8
North Carolina	352	−14.4	+149.6	965	3,087	−2.5	+43.3
Virginia	199	−8.7	+86.0	602	1,173	+5.7	−15.1
West Virginia	92	+16.4		783	3,262	+3.8	−5.4
Region V:							
Kentucky	93	−1.1	+52.4	969	4,172	+7.6	+15.9
Michigan	509	+26.0	+83.8	4,397	11,535	+22.5	+4.8
Ohio	543	+29.9	+42.1	2,992	16,817	+.4	+35.1
Region VI:							
Illinois	596	−54.1	+98.7	3,914	14,015	+18.6	+107.6
Indiana	274	+67.1	+109.2	1,372	8,182	+6.3	−5.0
Wisconsin	212	+8.7	+46.2	1,132	8,196	−3.2	+1.2
Region VII:							
Alabama	69	−20.7	−40.0	1,660	4,707	+21.9	+3.1
Florida	113	−32.7	+73.8	1,656	4,904	+32.4	+94.5
Georgia	137	+9.6	−38.0	838	3,585	−6.4	−6.2
Mississippi	97		+14.1	574	1,612	+8.6	+28.3
South Carolina	157	−23.8	+180.4	412	1,371	+.1	+3.9
Tennessee	144	+20.0	+53.2	821	4,849	+4.0	+2.1
Region VIII:							
Iowa	481	+75.5	+73.0	977	4,925	+2.4	−9.9
Minnesota	158	−16.0	+16.2	1,561	7,535	+8.5	−27.8
Nebraska	101	+3.6	+16.1	486	2,899	+2.6	+39.8
North Dakota	33			128	1,348	+1.6	+.8
South Dakota	30			326	1,481	+14.6	−9.2
Region IX:							
Arkansas	250	+50.6	+96.8	790	2,180	+13.9	−6.4
Kansas	213	+31.5	+90.2	1,054	3,773	+11.3	−1.9
Missouri	819	−4.6	+183.4	2,306	9,467	−.3	+3.7
Oklahoma	151	+81.9	−22.6	1,208	3,485	+21.4	−39.0
Region X:							
Louisiana	106	−19.7	+49.3	705	3,993	+.2	+82.7
New Mexico	55	−55.3	−9.8	318	1,756	+3.6	−2.4
Texas	700	−33.8	−17.9	1,991	7,612	−6.8	−3.1
Region XI:							
Arizona	166	+44.3	+14.5	367	1,118	−4.4	−23.4
Colorado	110	+111.5	+18.3	1,040	3,099	+4.2	+4.6
Idaho	168	+73.2	0	591	1,179	−5.8	+38.5
Montana	81		−12.9	415	1,608	+9.0	−13.6
Utah	48			160	1,193	−3.9	−14.5
Wyoming	56	−65.4		287	568	+21.9	−10.6
Region XII:							
California	1,420	+44.4	+47.6	7,519	22,572	+4.3	−8.4
Nevada	120	+118.2	+69.0	172	273	−13.3	−26.6
Oregon	376	+33.3	+32.4	1,001	2,814	−3.8	+39.9
Washington	265	+38.7	+6.8	1,830	3,192	+10.8	−34.1
Territories:							
Alaska	23			74	125	+4.2	−39.3
Hawaii	26			44	300	−7.1	−25.4

[1] Where fewer than 50 veteran placements were involved in either period the percent of change was not computed.

UNEMPLOYMENT-COMPENSATION OPERATIONS, MARCH 1941 [1]

THE improvement in industrial activity since November 1940 has been reflected in successively sharper reductions in claims and payments for unemployment compensation from comparable periods in preceding years. In March 1941 the number of workers receiving benefit payments was, on the average, 333,000 fewer than in March 1940. Similarly, continued-claim [2] receipts were 34 percent lower and benefit payments were 29 percent less than in the same month in 1940.

Continued claims for March numbered 3,700,000, a decrease of 8 percent from the previous month, and benefit payments declined 3 percent to $33,600,000. Benefit payments to unemployed workers compensated nearly 3,200,000 weeks of unemployment, and a weekly average of 762,000 persons received benefits during March, or 45,000 fewer than in February.

The widespread decreases from February in continued-claim receipts probably reflects not only the return to work of many claimants who had initiated new benefit years in the past two months, but also a slackening of lay-offs. All of the Middle Atlantic, Great Lakes, and Pacific Coast States, where intensive defense activity is under way, reported decreased receipts. Of the 36 States reporting fewer continued-claim receipts than in February, reductions of more than 20 percent occurred in Connecticut, Hawaii, Oregon, and Utah, and decreases ranging between 10 and 20 percent were shown by 17 additional States. Initiation of a new uniform benefit year on March 1, largely accounted for the increase of 59 percent in continued-claim receipts in New Hampshire. Fourteen additional States reported increased claim receipts; none, however, were for more than 11 percent.

The weekly average of continued claims for all types of unemployment declined 12 percent to 905,000. All but 10 States reported decreases from February in the average. The number of persons filing claims declined continuously from slightly more than 1,000,000 in the week ended March 1, to 804,000 in the last week of the month, the lowest weekly volume of claimants in any week of 1940 and 1941.

As in February, the proportion of weekly claim receipts for total unemployment to all claim receipts remained practically unchanged throughout the month—91 percent of all claims. The pattern of claims filed for total unemployment was similar to that for all unemployment, a continuous decline being noted from 925,000 totally

[1] Prepared by Research and Statistics Division, Bureau of Employment Security, Social Security Board.

[2] The term "continued claims" as used by the Bureau of Employment Security indicates certification that the claimant has completed a waiting-period week or a compensable period (usually a calendar week or 7-day period).

unemployed claimants during the week ended March 1 to 734,000 claimants in the last week ended within the month. The number of weeks of partial and part-total unemployment compensated in March totaled 273,000, a decrease of 2 percent from February. Illinois was the only agency in which more than one-fifth of all weeks compensated were for partial and part-total unemployment.

Declines from February in the weekly average number of benefit recipients were noted in 32 States, with Rhode Island and Utah reporting the outstanding reductions. Only 6 of the 19 States with more recipients than in February were located east of the Mississippi. A concentration of States showing increases occurred in the Rocky Mountain area which to date has been awarded the least amount in defense contracts.

Reduced benefit payments were reported in 30 States, decreases from February taking place in the New England and New York, Great Lakes, and Southwest and Pacific areas. Hawaii, Rhode Island, and Utah reported the largest declines, ranging from 23 to 28 percent; in 12 other States decreases exceeded 10 percent. At the same time, 21 States paid more benefits this month than last—a fact partly attributable to lay-offs and continued seasonal unemployment in a varied group of industries. None of these increases, however, exceeded 12 percent, which was approximately the increase in number of working days in March.

More than $107,000,000 in benefits were paid to unemployed workers in the first 3 months of 1941, or 19 percent less than the amount disbursed during the same time in 1940. Outstanding reductions from benefit payments in the first 3 months of 1940 were shown by Connecticut, Hawaii, Maryland, Michigan, Rhode Island, Virginia, and Wyoming. The impact of the defense program on employment has been especially pronounced in all ot these States except Wyoming. Of the 31 States which have had 3 full months of benefit payment experience during January-March in the last 3 years, 25 States paid less benefits in January-March 1941 than in any corresponding period. California and the District of Columbia, however, paid more in the first 3 months of 1941 than in any other corresponding period. Modification of benefit provisions has been largely responsible for the increased benefit payments in these two jurisdictions.

Continued Unemployment Compensation Claims [1] *Received, Weeks Compensated, and Benefits Paid, by State, March 1941*

[Data reported by State agencies, corrected to Apr. 22, 1941]

Social Security Board region and State	Continued claims [1]			Weeks compensated			
	Number	Type		Number	Type of unemployment		
		Waiting period	Compensable		Total	Partial and part-total combined [2]	Partial only [2]
Total	3,738,046	616,590	3,121,456	3,153,955	2,881,255	272,700	.....
Region I:							
Connecticut	36,361	6,634	29,727	29,984	28,057	1,927	(3)
Maine	23,327	2,412	20,915	19,713	16,352	3,361	2,002
Massachusetts	162,406	14,077	148,329	136,088	124,241	11,847	10,948
New Hampshire	19,791	10,112	9,679	8,972	7,924	1,048	(3)
Rhode Island	30,025	11,048	18,977	18,977	16,549	2,428	(3)
Vermont	10,274	1,785	8,489	8,717	8,108	609	420
Region II:							
New York	517,418	67,852	449,566	461,709	461,709	(3)	(3)
Region III:							
Delaware	11,500	1,302	10,198	10,088	8,196	1,892	1,727
New Jersey	146,355	30,530	115,825	117,074	117,074	(3)	(3)
Pennsylvania	301,822	80,149	221,673	226,910	226,910	(3)	(3)
Region IV:							
District of Columbia	25,485	2,921	22,564	22,577	21,126	1,451	(3)
Maryland	36,528	6,173	30,355	27,975	25,090	2,885	2,670
North Carolina	65,579	13,143	52,436	51,712	48,650	3,062	2,627
Virginia	29,111	1,446	27,665	27,422	25,216	2,206	1,102
West Virginia	27,091	3,931	23,160	23,154	22,795	[4] 359	(3)
Region V:							
Kentucky	18,289	2,486	15,803	31,716	26,964	4,752	(3)
Michigan	109,832	17,304	92,528	91,545	86,924	4,621	(3)
Ohio	201,612	52,136	149,476	152,640	133,953	18,687	(3)
Region VI:							
Illinois	190,867	19,559	171,308	178,672	136,884	41,788	28,237
Indiana	69,168	11,246	57,922	57,772	48,604	9,168	(3)
Wisconsin	39,257	12,269	26,988	26,443	23,344	3,099	1,668
Region VII:							
Alabama	56,208	11,872	44,336	44,465	41,122	3,343	746
Florida	40,079	9,417	30,662	30,830	25,506	5,324	(3)
Georgia	46,571	11,342	35,229	35,339	32,892	2,447	1,405
Mississippi	29,683	3,841	25,842	24,777	23,025	1,752	996
South Carolina	24,996	4,595	20,401	19,723	17,226	2,497	902
Tennessee	64,846	9,627	55,219	52,453	50,106	2,347	904
Region VIII:							
Iowa	61,093	13,253	47,840	48,843	42,163	6,680	1,078
Minnesota	126,108	10,681	115,427	114,206	106,486	7,720	(3)
Nebraska	27,415	2,716	24,699	24,422	22,142	2,280	1,385
North Dakota	12,309	1,160	11,149	10,346	9,013	1,333	794
South Dakota	7,852	1,659	6,193	6,079	5,790	289	(3)
Region IX:							
Arkansas	48,359	10,505	37,854	37,854	34,971	2,883	128
Kansas	31,860	9,755	22,105	22,615	19,560	3,055	1,903
Missouri	73,778	21,488	52,290	57,237	49,885	7,352	1,326
Oklahoma	38,726	8,477	30,249	30,256	25,065	5,191	606
Region X:							
Louisiana	72,901	11,228	61,673	60,340	55,339	5,001	(3)
New Mexico	13,773	2,006	11,767	11,693	11,145	548	180
Texas	114,963	14,704	100,259	73,814	63,074	10,740	(3)
Region XI:							
Arizona	11,335	2,798	8,537	8,530	8,069	461	53
Colorado	35,554	4,091	31,463	31,156	28,182	2,974	1,388
Idaho	28,403	3,105	25,298	26,314	25,212	1,102	(3)
Montana	47,864	4,580	43,284	42,340	42,340	(3)	(3)
Utah	12,008	1,136	10,872	11,389	10,016	1,373	273
Wyoming	11,780	2,215	9,565	9,131	7,610	1,521	835
Region XII:							
California	485,748	47,793	437,955	472,003	406,870	65,133	46,501
Nevada	11,078	1,012	10,066	10,073	8,956	1,117	338
Oregon	45,449	9,921	35,528	35,872	31,800	4,072	2,630
Washington	78,212	11,405	66,807	67,270	58,738	8,532	(3)
Territories:							
Alaska	4,257	1,139	3,118	2,656	2,488	168	0
Hawaii	2,740	554	2,186	2,069	1,794	275	266

Continued Unemployment Compensation Claims Received, Weeks Compensated, and Benefits Paid, by State, March 1941—Continued

[Data reported by State agencies, corrected to Apr. 22, 1941]

Social Security Board region and State	Benefits paid				Month and year benefits first payable	Amount of benefits since first payable [4]
	Amount [3]	Type of unemployment				
		Total	Partial and part-total combined [2]	Partial only [2]		
Total	$33,607,834	$31,686,762	$1,889,956			$1,451,436,540
Region I:						
Connecticut	309,742	297,078	12,288	(5)	January 1938	23,478,133
Maine	131,320	111,316	20,004	$11,876	do	11,523,557
Massachusetts	1,419,652	1,355,571	62,924	57,158	do	82,910,001
New Hampshire	80,544	75,195	5,349	(5)	do	6,875,264
Rhode Island	200,604	188,038	12,566	(5)	do	23,690,632
Vermont	83,804	80,153	3,620	2,265	do	2,567,363
Region II:						
New York	5,542,912	5,542,912	(2)	(2)	do	286,229,178
Region III:						
Delaware	82,376	70,632	11,612	10,642	January 1939	1,779,564
New Jersey	1,132,892	1,132,892	(2)	(2)	do	34,474,252
Pennsylvania	2,479,876	2,479,876	(2)	(2)	January 1938	178,262,199
Region IV:						
District of Columbia	275,203	258,429	16,227	(5)	do	5,965,454
Maryland	242,098	226,162	15,830	14,469	do	23,414,815
North Carolina	232,592	223,564	8,578	6,687	do	17,916,123
Virginia	221,892	209,276	12,584	5,349	do	16,796,819
West Virginia	199,841	196,676	3,165	(5)	do	20,875,103
Region V:						
Kentucky	228,619	207,124	21,258	(5)	January 1939	10,398,233
Michigan	1,030,697	1,004,309	26,388	(5)	July 1938	107,588,327
Ohio	1,461,693	1,360,123	91,969	(5)	January 1939	52,928,148
Region VI:						
Illinois	2,142,471	1,827,828	306,741	185,625	July 1939	68,199,432
Indiana	568,862	516,594	51,830	(5)	April 1938	37,767,897
Wisconsin	277,470	255,792	21,678	11,058	July 1936	20,598,507
Region VII:						
Alabama	300,359	282,496	17,473	3,101	January 1938	18,047,174
Florida	311,103	276,648	34,455	(5)	January 1939	10,806,275
Georgia	232,342	222,571	9,771	5,734	do	8,390,248
Mississippi	160,209	150,645	9,514	5,379	April 1938	5,529,305
South Carolina	130,437	118,317	11,889	4,022	July 1938	5,633,817
Tennessee	390,570	377,313	13,257	4,373	January 1938	18,101,232
Region VIII:						
Iowa	441,553	400,697	39,959	5,054	July 1938	13,065,102
Minnesota	1,192,504	1,131,925	60,579	(5)	January 1938	28,816,984
Nebraska	221,457	204,612	16,795	10,168	January 1939	3,795,830
North Dakota	99,034	88,399	10,635	6,423	do	1,426,123
South Dakota	44,146	42,401	1,685	(5)	do	911,414
Region IX:						
Arkansas	225,367	214,592	10,771	647	do	5,398,686
Kansas	194,545	174,846	19,699	11,495	do	4,900,008
Missouri	481,785	444,213	37,480	5,070	do	14,275,307
Oklahoma	265,479	234,466	31,013	2,252	December 1938	8,857,551
Region X:						
Louisiana	544,882	507,497	36,414	(5)	January 1938	18,284,110
New Mexico	101,410	97,292	4,118	1,256	December 1938	2,743,316
Texas	562,223	506,281	55,717	(5)	January 1938	31,711,698
Region XI:						
Arizona	89,809	86,399	3,410	292	do	5,000,933
Colorado	307,666	285,380	22,210	9,555	January 1939	8,550,459
Idaho	301,796	289,160	12,636	(5)	September 1938	5,435,281
Montana	468,450	468,450	(2)	(2)	July 1939	5,139,466
Utah	122,822	113,353	9,469	1,988	January 1938	6,312,442
Wyoming	114,966	101,244	13,722	6,606	January 1939	2,680,466
Region XII:						
California	6,545,593	5,956,040	583,016	404,596	January 1938	146,020,419
Nevada	130,880	119,311	11,569	3,114	January 1939	2,337,120
Oregon	419,163	386,537	32,102	19,820	January 1938	15,228,029
Washington	810,019	737,270	72,749	(5)	January 1939	18,202,507
Territories:						
Alaska	37,978	36,168	1,810	0	do	987,084
Hawaii	14,127	12,699	1,428	1,357	do	609,153

[1] I. e., certification that the claimant has completed a waiting-period week or a compensable period (usually a calendar week or 7-day period).

[2] Benefits for partial and part-total unemployment are not provided by State law in Montana, New York, and Pennsylvania. In New Jersey provision for such payments is not effective until Apr. 1, 1941.

[3] Includes supplemental payments, not classified by type of unemployment.

[4] Adjusted to exclude returned and voided benefit checks except for March 1941.

[5] Data for partial unemployment included with data for part-total unemployment.

[6] Payments for part-total and partial unemployment are made for benefit periods of 1 quarter. The number of weeks represented by each such payment is determined by dividing the amount paid by the claimant's benefit rate for total unemployment.

SICKNESS-INSURANCE SYSTEM FOR LONGSHOREMEN IN BRAZIL, 1940

CASH sickness benefits amounting to 50 percent of average longshoremen's pay, after 18 or more monthly contributions to their Insurance and Pension Fund, and medical, surgical, and hospital aid after 12 or more such contributions, were established in Brazil in 1940. Cash benefits are provided from a supplementary contribution, required from the insured, for persons unable to work but not entitled to disability benefits, maternity aid, or medical, surgical, or hospital assistance. The Office of Sickness Insurance, established to administer this aid (which was authorized in part by decree No. 4264 of June 19, 1939), is said to be the first such office in Brazil. It was created by Order No. 358 of August 30, 1940, as amended by order of February 6, 1941.[1]

Coverage of System

Sickness insurance is to apply to all persons contributing to the Longshoremen's Retirement and Pension Institute and to persons receiving invalidity or old-age insurance benefits from the Institute. Insured persons include all those making contributions, whether or not they are members; thus including both longshoremen and persons employed in the administration of the Institute.

Sources of Funds

The sources of support for the sickness insurance are the following: (1) The cash surplus from industrial accident-insurance premiums; (2) supplementary contributions by the insured persons, amounting to 1 percent of their pay up to 2,000 milreis [2] per month or 300 milreis per day; and equal contributions by employers and the Federal Government; (3) contributions of one-half of 1 percent from the insured officials of the Institute; and an equal contribution from the Institute; (4) a payment of two-thirds of 1 percent of their pensions from persons receiving invalidity or old-age benefits; (5) 5 percent of cash benefits from the insured persons receiving cash sickness benefits; (6) 5 percent of the last year's annual receipts of the Institute; and miscellaneous receipts. Contributions are due also from insured employees who occasionally render services to the Institute, even though not registered in it. An insured person working on his own account pays double the ordinary contribution for his class. Employees' contributions are to be deducted by employers from the regular pay and (together with their own) deposited in the Institute.

[1] Data are from Revista do Trabalho (Rio de Janeiro), September 1940; Boletim do Ministério do Trabalho Indústria e Comércio (Rio de Janeiro), September 1939; and Legislação do Trabalho (São Paulo), March 1941.

For a general account of social insurance in Brazil, see Monthly Labor Review, September 1939 (pp. 535–565): Social Insurance in Latin America (also reprinted as Serial No. R. 1004).

[2] Average exchange rate of milreis, 1940=about 6 cents.

The rates of contributions and benefits are to be revised biennially by the Ministry of Labor, Industry, and Commerce, upon recommendation of the Actuarial Council. The surplus finances, up to 12 percent of the annual receipts, shall constitute a contingent fund to meet any deficit occurring in the office, the rest of the surplus being devoted to increasing the cash benefits to members or for other purposes as determined by the Ministry of Labor, Industry, and Commerce, upon specified expert advice.

Benefits

Cash benefit.—Cash benefits shall be paid to an insured person who has made 18 or more monthly contributions into the Institute and who, for a period of more than 10 days is unable to work. Benefits begin with the eleventh day and continue for a maximum of 12 months. This benefit is not payable to persons injured in industrial accidents (covered by the decree of June 19, 1939, article No. 143), nor to the insured officials of the institute who are entitled to medical, surgical, and hospital service, and to maternity aid. The granting of sickness benefit is conditioned upon a medical examination, requested by the insured person, his employer, or the union to which the insured person belongs, during the course of his illness. The cash benefit must be requested before termination of the period of illness.

The cash benefit is two-thirds of the daily wage, but may not exceed 18 milreis nor the value of the invalidity retirement benefit. This benefit is reduced by one-half when an insured person without registered dependent is hospitalized by the Sickness Insurance Office. In case the disability lasts beyond the maximum period for sickness insurance, invalidity benefit shall be granted. During the period of sickness insurance, the insured person may request a medical examination with a view to being transferred to invalidity insurance, but in the eleventh month he must submit to such an examination in order to determine whether he is to be discharged or whether he shall receive invalidity benefit.

Medical, surgical, and hospital aid.—Insured persons who have made 12 or more monthly contributions shall be entitled to medical, surgical, and hospital aid, preference being given in such treatment to cases of contagious diseases and those of greater social danger. Medical benefit shall also include dental service. Preventive treatment shall be classed as medical assistance, including prenatal attendance, maternity assistance, and that for infancy and youth, vacation colonies, and pre-tuberculosis treatment. Medical aid shall be furnished in field hospitals and medical posts, except when the insured person cannot be moved. Hospitalization, when prescribed by the physician of the Institute, is compulsory, and an insured person who refuses it

loses all the rights provided by this legislation. When there is doubt about the necessity for attention, the patient may be hospitalized for a maximum period of 8 days for observation and diagnosis. Hospital or field-hospital service may be contracted for or provided in the employers' own hospital facilities. Persons already retired for disability may have medical service as well, by paying their contribution of two-thirds of 1 percent of their invalidity benefits. Medical assistance, as well as the right to cash benefit in case of contagious disease and greater social danger, shall be extended to dependents registered in the Institute. Assistance shall be rendered at home only when it is impossible to receive it in the field hospital.

Maternity benefit.—Maternity aid is payable to an insured woman member who has made 18 monthly contributions into the Institute, and to a woman dependent upon an insured person under the same circumstances, by request made before childbirth (except in case of accident, duly proved). The amount of the aid shall be paid during 4 weeks before and 4 weeks after the birth; it is divided into 2 parts, of which one is paid at the sixth month of pregnancy and the other upon verification of the birth. When the request for cash aid is made after the birth, payment shall be made in a lump sum immediately after such request is granted. The maternity aid is granted without prejudice to rights which the legislation governing women's work provides for the insured woman.

The amount of cash maternity benefit shall be equal to half the regular pay or salary-base class, on the basis of the 12 months preceding the birth, but cannot exceed 50 milreis per week. The amount of cash aid shall be reduced in an amount to be determined later, if the insured person is hospitalized upon request or for observation. The prospective mother shall have a right to maternity aid only if she has been registered as an insured member, or as the dependent of an insured person, for more than 9 months, and if her state of pregnancy has been attested with sufficient priority by the medical service of the Sickness Insurance Office. The 9-month registration period, in case of dependents, shall not be required in all cases within the first year of marriage, provided that in all cases provisions as to registration specified in the decree of June 19, 1939, are safeguarded. Maternity aid shall not be granted if requested more than 3 months after the birth.

General Provisions

The insured person or dependent who uses fraud in order to obtain sickness benefits provided herein shall pay expenses and damages, without prejudice of the criminal action which may be due.

The purchase of materials necessary for the installation of the services provided for in these instructions shall be made by means of a

loan to the Institute, payable, with 7-percent interest, within a period of 5 years, which may be extended at the discretion of the President of the Institute. Except for the purchase or construction of property, these loans are limited to sums so small that the total of repayments on principal, together with interest, shall not exceed 5 percent of the annual receipts of the Institute, calculated on the basis of experience during the year preceding the loan.

DETERMINATION OF NEED FOR BRITISH UNEMPLOYMENT ASSISTANCE

THE household "means" test provided for under the British Unemployment Assistance Act, 1934, and the Supplementary Pensions Act, 1940, was greatly modified by an act which received royal assent March 26, 1941.[1] On November 6, 1940, it was announced by the Prime Minister that, in response to representations by members of all parties, legislation would be introduced to give effect to certain changes designed to remove causes of complaint against the existing means test.

Under the earlier law, in determining the need of applicants for unemployment assistance or supplementary pensions, the resources of all members of the household of which the applicant was a member were taken into account. The present law abolishes this requirement and provides that whether or not the applicant is the householder, the resources of members of the household other than the applicant, the husband or wife of the applicant, and any member of the household dependent on the applicant, shall not be regarded as resources of the applicant, but where the applicant is the householder or the husband or wife of the householder, the resources of the applicant shall except in exceptional circumstances be considered to include contributions (prescribed in the regulations) towards the expenses of the household from persons who are nondependent members of the household.

In the case of a nonhouseholder who is either the son or daughter or one of the parents of the householder and on whom no other member of the household is dependent, the needs of the applicant shall not be considered to include the need of making contributions toward the cost of his board and lodging or other expenses of the household if the income of the household exceeds a sum to be specified in the regulations. The effect of this provision is to enable an unemployment allowance to be paid to an applicant for his personal needs in cases where the resources of the household are such that he would not

[1] Great Britain. Determination of Needs Act, 1941; Ministry of Labor Gazette, April 1941; and Parliamentary Debates, February 13 and March 26, 1941. The Economist (London), February 22, 1941.

be expected to pay for his board and lodging. In the case of an old-age pensioner under such circumstances, the old-age pension will be regarded as covering his personal needs.

In computing the resources of an applicant for unemployment allowances, supplementary pensions, or financial assistance under the Blind Persons Acts, money and investments treated as capital assets shall be disregarded up to the amount of the person's war savings, subject to a limit of £375, in addition to money and investments treated as capital assets which are disregarded under the former law. Investments so disregarded shall be construed as extending to any income therefrom. The act fixed August 14, 1940, as the date after which it will not be possible to turn pre-war savings into war savings.

The Unemployment Assistance Fund established under the 1934 act will be closed on a date to be fixed by the Treasury and all sums received by the Assistance Board will be paid into the Exchequer, and all expenses of the Board (including the amount of allowances issued under the Unemployment Assistance Act) will be defrayed out of funds provided by Parliament.

The law provided that draft regulations should be issued within 1 month from the passage of the act, for the purposes of determining need and assessing the needs of applicants both for unemployment assistance and supplementary pensions.

Draft regulations, governing the operation of the new law, were submitted to Parliament by the Minister of Labor and National Service, following its enactment.

It is proposed that if the applicant (or his wife or her husband) is the householder, his resources will be considered to include a contribution towards the household expenses from each nondependent member. The maximum contribution is fixed at 7s. a week, but if the nondependent member's income consists of earnings the contribution will be 5s. for earnings of less than 55s. a week but over 30s., 2s. 6d. for earnings of 30s. a week or less but more than 20s., and earnings of less than 20s. will be disregarded. However, if a householder has an income in excess of £6 a week, not including any income which is disregarded for this purpose, an unemployed person will not be expected to pay for his board and lodging. This amount is based on the assumption that the householder in such a case will normally be married or have one other dependent exclusive of the applicant, but in fact the amount will not be reduced if the householder has no dependents other than the applicant. If, on the other hand, the householder has two or more dependents exclusive of the applicant, 15s. a week will be added in respect of the second and each succeeding dependent, whether a child or an adult. Where there is more than one applicant in the household the amount by which the income limit of £6 will be increased in respect of each applicant after the first is 25s. As regards applicants

under 18 years of age, the income limit will be modified to the extent of substituting a figure of £5 5s. for that of £6 with the same provisions for increasing this amount as in the case of applicants over that age. These regulations will be subject to discretionary power to exceed these income limits in special circumstances.

In cases in which an applicant for unemployment-insurance allowances is not required to pay for his board and lodging, the allowance for personal expenses, subject to any resources he himself may possess, will be 5s. per week.

In case of applicants 18 years of age or over who are not householders or living as members of households, their needs are considered to include the need of making such contribution by way of rent as may be prescribed.

The new provisions, if the draft regulations were approved by Parliament, were to come into force on June 2, and all existing cases were to be reviewed on the basis of these provisions by August 2, 1941.

PAID VACATIONS IN THE DOMINICAN REPUBLIC, 1941 [1]

THE giving of 2 weeks' annual vacation with pay to employees in commercial enterprises of all kinds is made compulsory in the Dominican Republic, by law No. 427 of March 17, 1941. Such vacation is to be granted to all permanent employees paid by the week, fortnight, month, or other fixed period, with one year's uninterrupted service in the establishment. This annual leave cannot be refused, suspended, or diminished because of absences from work on account of sickness duly proved.

The administrators of establishments may set the time when their employees may have their vacations, in the order that they consider most advantageous for the efficiency and normal operation of their work. At the end of each quarter of the calendar year, the persons in charge of establishments must prepare lists of those who are to have their vacations in the following quarter; a copy of this list is to be posted in a conspicuous place. In case of necessity this list can be varied up to the third quarter of the year, but with the understanding that employees whose names have been taken from one quarter's list shall have their vacations in the following quarter. At the beginning of his vacation each employee shall sign his name beside the name as it appears on the list, to furnish proof for the enterprise that it has granted him the vacation to which he was entitled.

If an employee fails to obtain his annual leave during the year, after having asked for it in writing, he is entitled to a month's salary in addition to regular pay. He may take legal means to secure this pay, even though he may have ceased to be employed in the enterprise, but this action must be taken within a month from the date when he leaves the service of the employer. This right to extra pay does not apply when it is proved that the employee did not claim his vacation and in failing so to do had the intention of securing the supplementary pay. Fines are provided as penalties in case of certain acts seeking to circumvent the provisions of this legislation.

[1] Data are from report of William Belton, United States vice consul at Ciudad Trujillo, Dominican Republic, enclosing Gaceta Oficial (Ciudad Trujillo) March 19, 1941.

During 1941, the annual vacation shall amount to 1 week, and the first quarterly list of vacations was due on the last day of March 1941, covering vacations to be taken in the quarter ending June 30.

It is said that the law will not be of great importance to most large organizations in the Dominican Republic, as 2 weeks' leave with pay for employees has long been an established practice with them. As day laborers are not benefited by the law, the sugar companies and other enterprises employing large numbers of such workers will not be seriously affected.

Cooperation

FARMERS' COOPERATIVE PURCHASING IN THE UNITED STATES, 1913 TO 1939–40

THE Farm Credit Administration estimates in a recent report [1] that the 2,649 farmers' cooperative purchasing associations had a business in 1939–40 amounting to $358,000,000. The membership served by these associations is estimated as 900,000. These organizations purchase, for the most part, supplies used in the business of the farm, such as feed, seed, fertilizer, twine, containers, etc. A great many of them handle gasoline, lubricating oil, and grease, used both for the farm machinery and for the family cars. A small but increasing number are handling consumers' goods of various kinds, such as groceries and household supplies.

Cooperative purchasing by farmers has had a slow but continuous growth since 1913, the first year for which satisfactory data are available. In that year the business of purchasing associations formed only 1.9 percent of the total done by farmers' cooperatives; the other 98.1 percent was done by the marketing and processing associations. By 1939–40 the purchasing business had risen to 17.2 percent of the total.

Table 1 shows the development of the farmers' cooperative purchasing associations since 1913. It also shows, for each year, the proportion that these associations formed of all types of farmers' cooperatives. It is evident from this table that, although the cooperative marketing and processing associations still account for by far the largest membership and business, they are steadily losing ground to the purchasing associations.

In table 2 is shown the relative development, geographically, of farmers' cooperative purchasing. As it indicates, the North Central States account for over three-fifths of all the associations and over half of the members and of business done.

[1] Farm Credit Administration. Cooperative Research and Service Division. Miscellaneous Report No. 34: Statistics of Farmers' Marketing and Purchasing Cooperatives, 1939–40 marketing season, by R. H. Elsworth. Washington, 1941.

TABLE 1.—*Number, Membership, and Business of Farmers' Cooperative Purchasing Associations, and Percent of All Farmers' Cooperatives, 1913 to 1939–40*

Year	Associations		Estimated membership		Estimated business	
	Number	Percent of all farmers' cooperatives	Number of members	Percent of all farmers' cooperatives	Amount	Percent of all farmers' cooperatives
1913	111	3.6	(1)	(1)	$5,298,000	1.9
1921	898	12.2	(1)	(1)	57,721,000	4.6
1925–26	1,217	11.3	247,000	9.1	135,000,000	5.6
1927–28	1,205	10.6	398,000	13.3	128,000,000	5.6
1929–30	1,454	12.1	470,000	15.2	190,000,000	7.6
1930–31	1,588	13.3	392,000	13.1	215,000,000	9.0
1931–32	1,645	13.8	533,000	16.7	181,000,000	9.4
1932–33	1,648	15.0	542,700	18.1	140,500,000	10.5
1933–34	1,848	17.0	692,000	21.9	152,000,000	11.1
1934–35	1,906	17.8	790,000	24.1	187,000,000	12.2
1935–36	2,112	20.1	950,000	26.0	254,000,000	13.8
1936–37	2,601	24.2	856,000	26.2	313,400,000	14.3
1937–38	2,600	23.9	900,000	26.5	350,000,000	14.6
1938–39	2,600	24.3	890,000	27.0	335,000,000	16.0
1939–40	2,649	24.7	900,000	28.1	358,000,000	17.2

[1] No data.

New York led all of the States as regards amount of business during the 1939–40 marketing season. The 10 leading States together did two-thirds of all the cooperative purchasing in that year.

The data for business done, shown in table 2, includes both retail and wholesale business of all types of purchasing associations.

TABLE 2.—*Distribution of Farmers' Purchasing Associations, by Geographic Division and Leading States, 1939–40*

Geographic division and State	Associations		Estimated membership		Estimated business	
	Number	Percent of total	Number of members	Percent of total	Amount	Percent of total
United States	2,649	100.0	900,000	100.0	$358,000,000	100.0
New England	67	2.5	105,450	11.7	30,555,000	8.5
Middle Atlantic	292	11.0	87,700	9.7	59,700,000	16.7
East North Central	628	23.7	261,000	29.0	104,000,000	29.0
West North Central	1,003	37.9	249,900	27.8	83,405,000	23.3
South Atlantic	158	6.0	60,830	6.8	27,030,000	7.5
East South Central	83	3.1	27,800	3.1	5,690,000	1.6
West South Central	99	3.7	25,000	2.8	7,760,000	2.2
Mountain	169	6.4	36,320	4.0	9,530,000	2.7
Pacific	150	5.7	46,000	5.1	30,330,000	8.5
Leading States						
New York	186	7.0	60,000	6.7	43,200,000	12.1
Minnesota	253	9.6	79,000	8.8	28,700,000	8.0
Illinois	131	4.9	94,000	10.4	26,000,000	7.3
Ohio	110	4.1	35,000	3.9	23,600,000	6.6
Massachusetts	13	.5	92,500	10.3	23,000,000	6.4
Indiana	92	3.5	52,000	5.8	22,500,000	6.3
Wisconsin	224	8.5	61,000	6.8	21,200,000	5.9
Missouri	157	5.9	30,000	3.3	20,000,000	5.6
California	29	1.1	15,000	1.7	15,500,000	4.3
Virginia	53	2.0	40,000	4.4	13,500,000	3.8
All others	1,401	52.9	341,500	37.9	120,800,000	33.7

COOPERATIVES IN NEWFOUNDLAND

A RECENT report issued by the Newfoundland Government[1] describes the development of various types of cooperatives there.

Active encouragement of cooperatives began subsequent to the report of a survey of the possibilities for cooperation, made in 1934 under the auspices of the Cooperative Union of the United Kingdom, with the approval and assistance of the Newfoundland Government.

In 1936 a Cooperative Division was organized in the Newfoundland Department of Agriculture and Rural Reconstruction, the duties of which are not to organize cooperative associations, but "through education motivate the people to do these things for themselves." In carrying out this program study or discussion groups are organized, through which the people become familiar with the economy of their communities. The next step is generally the undertaking of some group activity, such as a credit association, a consumers' cooperative, or a marketing association. Then follows the starting of a community council, to coordinate the activities of the various groups and "lay the foundation for local responsibility."

All of the early associations were handicapped by the lack of a law specifically authorizing the formation of cooperative associations. Such an act was, however, passed on July 13, 1939. It not only gives legal status to cooperatives but sets up cooperative standards to which they must conform.

By August 1940 the register of cooperatives included 22 credit unions and 18 general-purpose associations. Other associations expected to have qualified by the end of the year numbered 43, bringing the total to 83.

In 1939 the registered credit unions had a combined membership of 2,103 and made loans during the year amounting to $28,020. The registered general-purpose associations had 1,500 members and an annual business of $172,237.

Cooperatives on the West Coast

The Cooperative Division started its work on the West Coast of Newfoundland. The first study club—at Lourdes—led to the formation of a credit union there. Other communities followed this example and study clubs up and down the coast became credit unions in their turn.

In 1937 a lobster-marketing association was formed which in three seasons became "what is now the largest lobster cooperative in the world," an organization that has brought hundreds of thousands of dollars into the pockets of the members. By 1940 it had a membership

[1] Newfoundland. Department of Agriculture and Rural Reconstruction. Report of the Cooperative Division, by Gerald Richardson. St. John's, 1940.

of 1,500 fishermen over 700 miles along the coast. By organizing its market so as to feed the catch into the market gradually, and by substituting the shipment of live lobsters in good condition for the canned lobsters formerly packed in insanitary and inefficient home canneries, the association by the end of 1940 had returned $225,000 in cash to its members—"at least 40 percent more than they might have had under the old system of local barter." The association turned to the cooperative purchase of supplies also, saving thousands of dollars in the purchase of food and fishing gear. Under the old system of individual barter the fishermen barely cleared expenses and "no sooner was the voyage over than the fishermen were seeking relief."

The success of the marketing association led to the formation of others and the opening up of new districts never before fished in. Herring and eggs are other commodities the sale of which has been organized cooperatively.

Through a central committee the purchasing activities of the eight districts are centralized, and the experience and educational work can also be coordinated. Although the responsibility for keeping up the quality and for studying local supply and marketing conditions lies with the men, the work of collection and marketing has been done under the direction of members of the Newfoundland Cooperative Division. It is believed that by the spring of 1942 the associations will be strong enough to take over these services and become entirely independent.

In 12 West Coast communities, credit unions were in operation in 1940, and 3 others were about to be chartered. The 12 organizations had over 800 members, had accumulated funds amounting to over $14,000, and had made loans of about $23,000 without a loss.

General-purpose consumers' cooperative stores had been formed in 5 communities and there were buying clubs in 4 others. During 1939–40 these cooperatives had an aggregate business of $172,237 and returned in patronage refunds the sum of $13,920.

Cooperatives on East and South Coasts

Placentia Bay, the report states, is the most depressed section of Newfoundland. In this region are 20,000 people living in some 150 settlements scattered along a rugged coastline of 318 miles. Only two sections in this entire region offer any agricultural prospects, and there is one fluorspar mine. Fishing is the only other occupational possibility in all the rest of the region.

Conditions for the spread of cooperatives were unusually adverse because of the sparse population, the disorganization of the fishing industry, and the unusually high percentage of illiteracy. Illiteracy was at least 50 percent and many communities had no schools at all.

Nevertheless the people in most of the communities were organized by the Provincial staff into study groups, to consider fish and lobster markets, local marketing arrangements, and possible cooperative procedures.

It was believed that lobster fishing offered the best possibilities and emphasis was therefore placed on that. These lobster associations adopted a method different from that used on the West Coast. All of the catch was pooled and individual payment was made on the basis of the entire shipment. During 1940 the lobster cooperatives shipped direct to the Boston market 116,715 pounds of live lobsters. The total cooperative business, including boiled and frozen product, amounted to about one-third of the entire catch throughout the entire region. On the sales the 250 fishermen in the 18 communities participating received an average of 6 cents per pound for their catch—or about double that of the previous year.

The central cooperative accumulated equipment valued at $667 and paid wages amounting to $700.

Encouraged by this success the fishermen have begun increasingly to turn away from the old barter system. They have shown an interest in expanding their cooperative activities also. Several associations have begun the collection and marketing of cod-liver oil, and plans for 1940–41 include the marketing of scallops, fresh salmon, and fresh and smoked herring.

By the end of 1940 there were 26 cooperative buying clubs and retail stores in operation in the Placentia Bay region. Some of these grew out of the desire of the fishermen, a great many of whom were on relief, to stretch their allowances by pooling their orders. A number of these associations did not come into existence until some time in 1940, but altogether these purchasing cooperatives had a business of approximately $50,000 from September 1939 to August 1940. In the latter month their members totaled over 1,400.

At Grand Falls there is a cooperative retail association, started in 1920 and affiliated with the British Cooperative Wholesale Society, which has a membership of 1,003 and in 1939 did a business of $397,-714. Since its formation it has returned to its members, in patronage refunds, the sum of $568,026.

The Avalon Peninsula has taken the lead in Newfoundland in the development of credit unions. The report under review states that "the most successful retailing and marketing units in the country have been built on credit-union foundations." By 1940 there were 26 associations making loans of some $30,000 annually to "the little men in the little boats." Twelve additional associations were in process of obtaining their charters.

In 1939 a central credit union council was formed, to coordinate the work of the local associations. Through it they obtain their office

supplies. It carries on educational work and is planning the establishment of a central bank for credit unions.

Largely as a result of its work, the women throughout the Avalon Peninsula have become interested in handicraft work as a source of supplementary earnings for their families. Women's clubs in 19 communities during their first year of work marketed $3,500 worth of products.

Education and Training

NYA AID TO NEGROES, 1935–40

FROM June 1935, when the National Youth Administration programs began to operate, to June 30, 1940, approximately 300,000 Negro youth received wages from that organization for part-time work on their NYA jobs.

The Division of Negro Affairs was constituted as a unit of the National Youth Administration at the time of the latter's establishment in 1935. Special State Supervisors of Negro Affairs have been appointed in 27 States. Over 500 Negroes serve as project supervisors. The NYA Advisory Committees of 23 States, as well as numerous NYA local planning boards, have colored members.

During the fiscal year ended June 30, 1940, the total number of individuals employed on the NYA part-time work programs reached 136,000; the student-work program employed 64,000 and the out-of-school work program, 72,000.[1]

Student-Work Program

Of the 64,000 Negro young people on the 1939–40 student-work program, 55,000 were in grade and high schools and 9,000 in colleges and universities.

In schools and colleges attended by both white and colored, Negro students shared in employment on NYA projects. Negro high schools were allotted funds, and in the scholastic year 1939–40 the amount apportioned among 113 colleges for colored was $468,021. A special fund aggregating $105,000 was established in addition to the amount allocated to schools and colleges to make it possible for Negro college and graduate students to pursue their studies in other States, when their own States had no facilities for them.

The urgent need of the young Negroes for financial aid to enable them to continue their education is indicated by the low incomes of their families. During the school year 1939–40, one-half of these families had incomes under $332 per annum and over two-thirds had less than $500. Less than 1 family in 17 had a yearly income as high as $1,000.

[1] U. S. National Youth Administration. The Tenth Youth. Washington, 1940.

The selection of students is made by the school authorities, who consider not only the need of the applicant but also his scholarship record. These authorities also plan the NYA projects.

Wherever practical, especially in the colleges and universities, projects are planned to enable the young people to work in their chosen fields. For example, some NYA students in the Howard University history and library departments are employed on a project which includes the compilation of pictures, clippings, articles, etc., concerning important events related to Negro history and personalities. Students in the department of education of that university and at Miner Teachers College are detailed to a project which involves their development and application of aptitude, knowledge, and personality tests. Negro students also aid in classrooms, laboratories, and museums; tutor physically handicapped students; assist on statistical and research studies; work in school libraries; construct classroom apparatus and models; and act as recreational leaders.

Approximately 20 percent do clerical work for the colleges or universities in which they are studying; another 20 percent repair, improve, and beautify school buildings, landscape, and construct athletic fields and swimming pools; and about 12 percent are engaged on home-economics projects in nursery-school supervision, sewing, preparation of school lunches, and similar lines of work.

Negro youth in the high schools do clerical work for teachers and principals, help in libraries, prepare and serve school-cafeteria lunches, repair furniture for classrooms, and do many other necessary jobs.

Besides helping to maintain themselves in school, these young people learn a great deal on their projects. In a California survey of NYA school youth, it was reported that the program made available a particularly effective means of training students for private employment. The work offered a type of responsibility not available through other kinds of student activities.

Out-Of-School Work Program

The 72,000 Negro young people on the out-of-school work program were engaged in various occupations. About 30 percent of the persons participating in this program get experience in construction. Approximately 50 percent of those doing construction work repair, modernize, and erect Negro schools and other public buildings.

Approximately 10 percent do clerical and general office work on "clerical assistance" projects through which they get experience in stenography, typing, filing, and general office practice.

About 20 percent are employed on professional and technical assistance projects; approximately half of this group assist playground and recreational supervisors and a like proportion work in hospitals and public health clinics.

Another 20 percent are placed in various kinds of shop work. Boys are assigned to woodworking, sheet-metal work, auto mechanics, machine-shop practice, and allied fields of labor; girls make and repair clothing, can food for relief families, and prepare supplies for hospitals. Approximately 10 percent, most of whom are girls, prepare school lunches, help in nursery schools, and work on different home-economics projects.

The remaining 10 percent of Negro youth on the out-of-school work program are employed on "resident projects." Negro youth are brought together in resident work centers, communities which have been set up on or near the campuses of Negro educational institutions. Here they live, receiving subsistence and a small cash wage in return for their work, while they acquire a sound combination of practical experience and classroom training, making use of the facilities of nearby agricultural and mechanical schools, teachers' colleges, vocational schools, hospitals, colleges, and universities for their classroom study.

The boys are placed in occupations varying with local community needs. Among their activities are soil conservation, animal husbandry, general farm work, farm mechanics, masonry, painting, and workshop trades. A great deal of attention is being given to the workshops in connection with national defense.

Girls are also assigned to home-management work, gardening, laundering, and sewing. The numerous activities for girls include the making of curtains, bedspreads, rag rugs, and work clothes for use on projects, or for distribution to public institutions and poor families.

In the fiscal year 1939–40 the Negro youth on resident projects numbered over 7,500, South Carolina employing 1,800 on such projects and Georgia more than 1,000.

The Slossfield Community and Health Center at Birmingham, Ala., is a unique and outstanding contribution to Negro development. The buildings and grounds represent one of the finest ventures in civic and governmental cooperation, which included the American Cast Iron Pipe Co., the Work Projects Administration, the Rosenwald Fund, the National Youth Administration, and Negro citizens and workers' groups. Here are located a clinic, a preschool center which provides food and directed activities for underprivileged children between the ages of 4 and 6, a homemaking unit, a branch of the city library, a sewing room, arts and crafts shop, woodworking shop, and recreation rooms. NYA youth assist in all of the activities and more than 500 boys and girls have been employed on this project since its inception.

Earnest efforts are made in the guidance of Negro youth on NYA projects to place them on jobs related to their aptitudes and abilities. Published material on particular occupations and employment trends is made available not only to project counselors and supervisors but to the NYA workers themselves.

Bulletins calling the attention of Negro young people to local occupational opportunities have been prepared and distributed by several States. Georgia, for instance, has prepared a handbook dealing with the vocational guidance of Negroes, and Ohio has issued

studies on employment opportunities in Columbus and Cleveland. The Youth Administration of Kentucky has published a pamphlet on Negro youth in that State, and a bulletin on the selection of a vocation has been prepared in Indiana.

Promotion of Health

One of the outstanding contributions of the NYA is the promotion of health and the improvement of the physical fitness of the young people eligible for jobs on the out-of-school work program. In this connection health programs have been developed in cooperation with the United States Public Health Service.

Wherever practicable, project workers on the NYA out-of-school programs receive a thorough physical examination. In Atlanta, Ga., through the State Tuberculosis Association, Negro NYA workers are given such examinations, including the skin test for tuberculosis and the Wassermann test. With the aid of the Flint-Goodridge Hospital in New Orleans, every Negro NYA project worker in that city has had a physical examination. In both Atlanta and New Orleans considerable follow-up work and necessary treatment for these Negro youth are reported. Their sight and hearing are carefully checked up and specific practical training in health habits is provided.

A SOUTHERN EXPERIMENT IN NEGRO EDUCATION

FOUR years ago an experiment in Negro education was started in Shreveport and Caddo Parish (county), Louisiana, which is now in process of further development.[1] Shreveport and Caddo Parish constitute a single administrative unit with a population of nearly 150,000 of whom approximately 45 percent are Negroes. About 55 percent of these colored people live outside the city. The Negro population includes 16,000 children of school age. Up to the time this experiment was begun the old program of the three R's had prevailed; its inadequacy, however, had been recognized for several years.

A careful investigation of the needs of the Negroes in this locality disclosed that these people in general had very little other than that provided by Government relief. Moreover, the persons in this group seemed to know little about helping themselves. A small section of the county, which seemed to be in especial distress, was selected for the experiment in adult education.

A Negro agricultural worker was engaged and detailed to this area to live and work with his people to show them how to grow and conserve their food; to teach them improved methods of growing,

[1] Journal of the National Education Association (Washington), April 1941.

conserving, and marketing cash crops; and to work out a program of home and community improvement.

After 3 years of careful planning and work, gardening and canning clubs had been organized on an extensive scale, houses had been screened, and whole communities were engaged in making mattresses for themselves. Several new crops supplemented the cotton and corn crops of preceding years and the corn crop had been improved in both yield and quality. Negro farmers had been instructed how to cure meat, make harnesses from home-produced leather, minister to sick livestock, improve their orchards, and mend farm tools.

An outstanding development in this parish experiment is the opening of a Negro trade school in Shreveport. Among the many trades taught are commercial sewing and cooking, beauty culture, and shoemaking. In order to graduate from high school a boy or girl must spend at least 1 year out of the 4 high-school years at this trade school. Evening-school classes are also available for adults.

Adult Education and Teacher Training

This success led to a greater expansion of the adult-education program. Four additional centers were established, each in the charge of a trained colored worker. A Negro has also been engaged to carry on and supervise adult education for the whole parish. It has been decided to develop the work gradually so that it may be done more successfully.

It was obvious that the educational program for Negroes in the public schools of this parish was neither meeting the requirements of the children nor providing for their future needs as adults. According to the article under review, the young people were being taught very inadequately by teachers so strongly committed to the academic viewpoint that they did not realize that there could be any other type of education. It was decided that the existing courses should be retained but that their teaching should be modernized, and additional instruction should be given in as many things as possible to enable the children when they grew up to have better standards of living.

It was not feasible to dismiss nearly 400 Negro teachers of the city and parish. Nor were new teachers available from Negro colleges better trained than those in service. The problem resolved itself into an in-service retraining of an almost complete teaching personnel. Two competently trained Negro women were employed as general supervisors of instruction. We developed our own program for the retraining of the Negro teachers of the entire parish. The Caddo Parish School Board, without hesitancy, voted the necessary funds to operate a summer school of college grade for teachers of the parish without expense to them. This summer school has been in operation now for 4 years and will be continued. It is not compulsory, but about 70 percent of the teachers of the parish attended each summer.

The present program of the parish summer schools for Negro teachers is a simple one—to instruct teachers in the same methods and the same subjects that they are expected to teach in their classes during the scholastic year. Some of the members of the faculty are college professors who are willing to try this experiment; others are progressive teachers in the parish school system. With the exception of the director, who is principal of a white high school of the parish, all the teachers in the new scheme are Negroes.

"Factual courses and methods classes have been combined to a large extent." The teaching of reading, history, arithmetic, chemistry, science, and art has been modernized. Teachers have been taught both how to sew and how to teach sewing; cooking, canning, poultry raising, hog raising, gardening, agriculture, and woodworking are important activities in the school program.

In connection with this summer school for teachers there is a demonstration school in which children are being taught under the new plan.

The parish teaching personnel is much more conscious of its opportunities to better the living conditions of the Negro people through this practical plan. Parents are showing in many ways a desire to help their children and also themselves. It is the intention of those responsible for the program to keep it "in its developmental stage so that it will not become static."

COURT DECISIONS OF INTEREST TO LABOR

Discrimination in Hiring Union Members Banned

IN THE first decision of its kind, the United States Supreme Court has held that an employer subject to the National Labor Relations Act may not refuse to hire employees solely because of their affiliation with a labor union.[1] When such discrimination in hiring has been found, the National Labor Relations Board may order the company to hire such persons and reimburse them for wage losses not "willfully incurred." Such employment may be ordered, even though the worker obtained substantially equivalent employment, if the Board shows that the offer of employment is necessary to effectuate the purposes of the National Labor Relations Act. In computing the amount of wages for which reimbursement is to be made, deductions may be made for amounts which a worker has "failed without excuse to earn" as well as for wages which were actually received after the discrimination occurred.

This case arose from a strike at the Phelps-Dodge Copper Mine in Bisbee, Ariz., in 1935. After the strike ended, certain employees who engaged in the strike were refused employment because of their affiliation with the union involved. In addition, two men who had ceased to be in the company's employ before the strike began sought employment and were refused. The National Labor Relations Board ordered not only that the strikers be reinstated with back pay, but that the company offer jobs to the two who were not employees at the time of the strike and to make up to them for any loss in pay resulting from its refusal to hire them.

Mr. Justice Frankfurter, delivering the Court's majority opinion, said that denial of jobs to men because of union affiliation is an "old and familiar aspect of American industrial relations" which the National Labor Relations Act was designed to remedy. Although the act "does not interfere with the normal exercise of the right of the employer to select its employees and to discharge them," discrimination against union men at the time of hiring is "a dam to self-organization at the source of supply" and therefore violates its declared policy to the same extent as does dismissal of employees because of

[1] *Phelps-Dodge Corp.* v. *National Labor Relations Board* (61 Sup. Ct. 845).

union membership. Since such refusal to employ was an unfair labor practice, the Court held that the Board had power to "neutralize the discrimination" by ordering employment and back pay. The fact that the victim of discrimination had obtained equivalent employment, Mr. Justice Frankfurter added, did not preclude the Board from undoing the discrimination and requiring employment. The functions of the Board are not limited to the correction of private injuries; it is its duty also "to give effect to the declared public policy of the act to eliminate and prevent obstructions to interstate commerce by encouraging collective bargaining." Although approving the Board's power to require an offer of employment under such circumstances, the Court referred this particular case back to the Board for determination as to whether such hiring would, in fact, effectuate the purposes of the act. The case was also referred to the Board for redetermination as to the amount of back wages to be required.

A dissenting opinion, written by Mr. Justice Stone and concurred in by Mr. Chief Justice Hughes, agreed that the refusal to hire the two men because of union activities was an unfair labor practice, but denied the correctness of the Court's ruling that the Board had the remedial power to order an "employer to hire applicants for work who have never been in his employ or to compel him to give them back pay for any period whatever."

Determination of Bargaining Unit by Labor Board Upheld

The Supreme Court, in a divided opinion, upheld an order of the National Labor Relations Board that six widely scattered plants of a company may be considered as one appropriate bargaining unit, even though the majority of the employees in one plant wished that plant to be treated as a separate unit. In this case [2] the Federation of Flat Glass Workers was designated by the National Labor Relations Board as the bargaining agent for employees of the six plants of the Pittsburgh Plate Glass Co., in spite of the fact that a local independent union claimed a majority at Crystal City, Mo.

Mr. Justice Reed, who delivered the opinion of the Court, declared that although the wishes of employees are a factor in a Board conclusion upon a bargaining unit they "are to be weighed with the similarity of working duties and conditions, the character of the various plants, and the anticipated effectiveness of the unit in maintaining industrial peace through collective bargaining." The evidence was held to justify the ruling of the Board that all the plants constitute a single bargaining unit. The Crystal City plant is a separate industrial unit and there is no interchange of employees, but

[2] *Pittsburgh Plate Glass Co.* v. *National Labor Relations Board* (61 Sup. Ct. 908).

the labor policies emanate from the company's central office, the wages, hours, and working conditions differ only slightly, and there is great similarity in the class of work done.

In a dissenting opinion, written by Mr. Justice Stone and concurred in by the Chief Justice and Mr. Justice Roberts, the minority held that the Board had not provided the plant union an "appropriate hearing." The Board had failed to do so on the grounds that the plant union was company-dominated and had ceased to function following a consent order against the company. The majority opinion, in approving the Board's exclusion of evidence offered by the plant union, declared that the plant union had forfeited its right to present such evidence because it had failed to intervene in the first proceeding in which the Board made its consent order against the company. Furthermore, the Court said, the excluded evidence would not have materially affected the outcome of the case.

Picketing by Labor Unions

Two cases involving questions of picketing by labor unions were decided recently by the Supreme Court. In one,[3] the Court held in a 5-to-3 decision that the Illinois Supreme Court had a right to grant an injunction restraining all picketing, including peaceful picketing, if these peaceful activities had become closely associated with violence. The case concerned an injunction issued against a Chicago milk-wagon drivers' union in a dispute with a dairy which used the so-called "vendor system" of milk distribution. Under this plan milk was sold to vendors operating their own trucks, and these in turn sold to retailers. The independent vendors worked at lower standards than the members of the union. In order to compel the abandonment of the system, the union began to picket the retail stores. In general the picketing of the stores was pursued peacefully by the union, over an extended period of time, but there were some sporadic acts of violence. It had been urged by a special master appointed to hear the case that all picketing should be enjoined, and the Illinois Supreme Court had sustained this view.

The majority opinion of the Court, delivered by Mr. Justice Frankfurter, held that to restrain picketing "set in a background of violence" does not involve infringement of the freedom of speech guaranteed by the fourteenth amendment, but is an exercise of the power of the State to prevent future acts of violence. The Supreme Court indicated that, in this decision, it was not passing on the wisdom of this injunction but merely upon the State's constitutional power. If the people of Illinois desire to withdraw the use of the injunction in labor controversies, they may do so by legislative act as has been done in

[3] *Milk Wagon Drivers' Union, Local 753*, v. *Meadowmoor Dairies, Inc.* (61 Sup. Ct. 552).

some other States. Two separate dissenting opinions, by Mr. Justice Black and Mr. Justice Douglas, and by Mr. Justice Reed, held that, although the Illinois courts had the right to enjoin violence, the far-reaching terms of this injunction invaded the constitutional guaranties of freedom of speech.

In the second injunction case,[4] also from Illinois, the Supreme Court in a 6-to-2 decision held that an injunction of the State court was invalid, since, in this instance, the order sought to restrain peaceful picketing merely on the ground that there was no immediate employer-employee dispute. In this case, a union of beauty-shop workers, failing in its attempts to unionize a certain beauty parlor, began picketing the plant. The employer had sought and been granted an injunction against "this interference with his business and with the freedom of his workers not to join a union." The Supreme Court decision held that the "State cannot exclude workingmen from peacefully exercising the right of free communication by drawing the circle of economic competition between employers and workers so small as to contain only an employer and those directly employed by him." The dissenting opinion of Mr. Justice Roberts, joined by Mr. Chief Justice Hughes, held that there was some evidence of threatened violence and that, therefore, this case should have been decided according to the holdings of the majority Court in the milk case.

Fee-Fixing Provisions of Nebraska Employment-Agency Law Upheld

The United States Supreme Court in a unanimous decision upheld a Nebraska law limiting the fees that may be charged by private employment agencies. The Court by this action overruled a former decision, rendered in 1928, which held that a State may not legally exercise such power (*Ribnik* v. *McBride*, 277 U. S. 350).

In the Nebraska case the State secretary of labor had withheld a license from a private employment agency which refused to limit the fees as prescribed by statute. On the basis of the former decision, the employment agency challenged the constitutionality of the law. Mr. Justice Douglas in delivering the opinion of the Court pointed out that the "drift away" from the Ribnik case has been so great in recent years "that it can no longer be deemed a controlling authority." Again, the Court referred to a number of recent cases upholding price-fixing schemes, and declared that "they represent in large measure a basic departure from the philosophy and approach of the majority" in the case decided more than a decade ago.

Finally, the Supreme Court observed that the employment agency could not base the invalidation of the Nebraska law on the "notions

[4] *American Federation of Labor* v. *Swing* (61 Sup. Ct. 568).

of public policy" contained in earlier decisions, for the reason that "since they do not find expression in the Constitution, we cannot give them continuing vitality as standards by which the constitutionality of the economic and social programs of the States is to be determined." The Court, therefore, reversed the decision of the Nebraska Supreme Court and held that the State law was not violative of the fourteenth amendment to the Constitution.[5]

Arizona Law Prohibiting Discharge Because of Union Membership Held Unconstitutional

The Supreme Court of Arizona has held unconstitutional a State law, passed in 1915, which made it a felony for an employer to discharge an employee on account of his "affiliation with or membership in any corporation, organization, or society." [6] The court held that the statute was "so indefinite and vague" that it violated the due-process clauses of the Federal and State constitutions.

This case concerned an employer who had been charged with dismissing an employee because of membership in a labor union. The court pointed out that discharge for membership in or affiliation with a labor union is not mentioned in the statute and therefore "not specifically condemned." Although the words "corporation, organization, or society" doubtless were intended to cover and include labor unions, they also would include any subversive organization or society. Furthermore, an employer could not discharge an employee-member of a corporation, organization or society operating in direct competition with him without violating the language of the statute and laying himself liable to prosecution.

Labor Organizer Awarded Workmen's Compensation

The death of a labor organizer who was shot and killed late at night was held by the Supreme Court of Minnesota to have arisen out of and during the course of his employment.[7] On the night of his death, the organizer had attended a union meeting. He left the meeting at 9:30 p. m., expressing his intention to return home and complete reports to be used at a labor meeting on the following day. His body was found about 80 feet from the garage in which he had put his car.

In holding that compensation was properly granted, the court pointed out that the only reasonable explanation of the organizer's killing was to be found in threats against him because of his union activities. Under conditions which existed in the labor field, the court said, and particularly in the Minneapolis area, a reasonable per-

[5] *Olsen* v. *State of Nebraska* (61 Sup. Ct. 862).
[6] *State* v. *Menderson* (111 Pac. (2d) 622).
[7] *Corcoran* v. *Teamsters and Chauffeurs Joint Council No. 32* (297 N. W. 4).

son familiar with the whole situation could well conclude that his death followed as a natural incident to his work and as a risk occasioned by the nature of his employment. The correctness of the finding of the industrial commission was held to be supported by the facts that the deceased had a substantial sum of money on his person, eliminating robbery as a motive for the killing, and that no evidence was presented that deceased had any personal enemy, or that his death was caused by an unintentional shooting.

Prison Labor

WORK OF FEDERAL PRISON INDUSTRIES CORPORATION, 1940

SUBSTANTIAL progress in diversifying the work of inmates of Federal penal and correctional institutions is shown by reports of the directors of Federal Prison Industries, Inc.[1] This corporation was established in 1934 to determine the manner and extent of industrial operations in Federal prisons and to diversify the work so that no single industry should bear an excessive burden of competition from prison-made goods.

Twenty-six different industries in 12 of the various penal and correctional institutions have given steady employment to approximately 3,500 inmates in the manufacture of articles for Federal Government use only. These inmates have more than repaid their per capita costs in labor values produced. In addition, they earned $280,000 in wages, of which those with dependents were required to send at least 75 percent home, thus materially lightening the burden upon local relief agencies. The total value of products sold during the fiscal year 1940 to various Government agencies was slightly over $5,200,000.

The policy of diversification has been continued by increasing the variety of articles manufactured rather than concentrating upon a few items which would throw an undue burden upon a small number of outside industries. Even in the larger industries, such as the manufacture of textiles or shoes, the policy of the Industries Board in supplying only a "pro rata proportion of the Government's demand" allays any fear that Federal prison industries will ever compete unduly with private industry. For example, during the past year the Bureau of Prisons released to the commercial market orders for over 1,750,000 pairs of shoes for Government use, reserving but a fraction of the needed amount for the prison shop at Leavenworth. In fact, the output of that shop is less than six one-hundredths of 1 percent of all shoes produced in the United States.

One new industry began production during the past fiscal year. This was a metal specialty shop, established at the Federal Correc-

[1] In U. S. Department of Justice, Annual Report of the Attorney General for the Fiscal Year Ended June 30, 1940, Washington, 1940.

tional Institution at Milan, Mich., where metal hospital, dormitory, and cell beds are to be manufactured.

To carry on the policy of diversification, a reserve fund has been created from earnings, for the purpose of establishing new industries and for carrying on a vocational-training and placement program. Practically all the standard items of furniture and equipment for the new penal institutions were made in the Government's prison shops.

In addition to those prisoners engaged in prison industries, another 3,500 are employed in dairying and farming and on construction and nearly 9,000 are assigned to maintenance tasks such as office work, culinary operations, hospital and mechanical service, and general maintenance work. In estimating the constructive employment of prisoners recognition must, of course, also be given to the time devoted to educational activities, which during 1939–40 was equivalent to the full-time employment of a large number of inmates.

CHANGES IN COST OF LIVING, MARCH 15 TO APRIL 15, 1941

THE cost of living increased 1 percent between mid-March and mid-April in the larger cities of the country, mainly because of the sharp rise in food prices. The food costs of moderate-income families rose by 2.2 percent, under the influence of earlier advances in wholesale markets with increased Government buying for foreign and domestic use, the policy of the Department of Agriculture in encouraging production by higher purchase prices, and the prospect of higher loan values. Other sections of the family budget were also affected by advances in costs varying from two-tenths to six-tenths of 1 percent. The recent increases bring the cost of living in the larger cities of the country to a point 2.2 percent above the 1935–39 average and 3.7 percent above the level of August 1939, the month before the outbreak of war in Europe.

The increase in the retail cost of food from mid-March to mid-April occurred in all sections of the country. Later reports from 18 cities for the last 2 weeks in April indicate continued increases in retail prices of lard, bacon, butter, and sugar. Costs of all groups of food were higher in April, with particularly sharp increases for lard and butter, and such staples as flour, sugar, and eggs. Prices for fresh fruits and vegetables were higher, as a result of the supply situation. Retail prices of foods have shown moderate but steady advances since November and in April were 5 percent higher than last autumn.

As compared with April 1940, the general level of food prices was 4½ percent higher, but price increases for some foods were considerably greater than this average. Thus, sugar prices were 7 percent above last April, reflecting the uncertainty of shipping facilities. April 1941 prices for certain cuts of meats, eggs, butter, lard, and some of the fresh fruits and vegetables ranged from 10 to 20 percent above April 1940.

Rent.—For the principal large cities combined, average rents rose 0.3 percent between March 15 and April 15. This average is based on all rents in the ranges paid by moderate-income families, including new and old tenants, homes for which rents changed, and those for

which they remained the same. In Buffalo, Philadelphia, and Baltimore, where defense activities have been increasing very rapidly since the first of the year, April rents averaged 1 percent or more above March rents. As has been the case recently, the increases in each of these cities were most extreme for dwellings renting for less than $30 per month.

Clothing.—Prices of clothing, which have been rising since early in 1941, continued to advance between March and April. Prices of overalls increased by 2.2 percent from mid-March to mid-April, and prices of work shirts by 1.0 percent. Higher prices were also reported for many other articles of clothing, particularly in New York and Chicago and to a lesser degree in Kansas City and Birmingham. Small increases occurred in the prices of men's and children's shoes in several cities.

TABLE 1.—*Percent of Change from March 15 to April 15, 1941, in Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers in 20 Large Cities, by Groups of Items*

Area and city	All items	Food	Clothing	Rent	Fuel, eletricity, and ice	Housefurnishings	Miscellaneous
Average: Large cities	+1.0	[1] +2.2	+0.2	+0.3	[2] +0.2	+ 0.6	+0.3
New England: Boston	+1.1	+2.3	+.2	[3]	+1.6	+.3	+.1
Middle Atlantic:							
Buffalo	+1.3	+2.4	+.1	+1.7	−.1	+.6	+.5
New York	+.8	+1.8	+.5	[3]	[3]	+.1	+.2
Philadelphia	+.9	+1.9	+.2	+.5	[3]	+.8	+.3
Pittsburgh	+.8	+2.6	+.1	[3]	[3]	+1.5	−.6
East North Central:							
Chicago	+1.0	+2.1	+.5	+.2	−.2	+.5	+.3
Cincinnati	+1.1	+2.6	+.2	+.2	[3]	+1.9	+.2
Cleveland	+.6	+1.8	+.1	+.3	[3]	+.1	+.2
Detroit	+1.3	+2.9	[3]	+.5	[3]	+.4	+.9
West North Central:							
Kansas City	+.9	+2.7	+.5	+.1	[3]	+.3	[3]
Minneapolis	+.5	+1.3	+.1	+.2	[3]	+.4	+.1
St. Louis	+.8	+1.9	[3]	[3]	[3]	+.8	+.3
South Atlantic:							
Baltimore	+1.1	+2.4	+.1	+1.1	+.1	[3]	+.1
Savannah	+.9	+2.3	[3]	+.4	[3]	+.4	+.3
East South Central: Birmingham	+.8	+1.8	+.5	+.6	[3]	+.3	+.4
West South Central: Houston	+.9	+2.1	[3]	[3]	−.1	+.9	+.7
Mountain: Denver	+1.2	+3.7	−.1	+.3	[3]	+.5	+.1
Pacific:							
Los Angeles	+.7	+1.9	[3]	[3]	[3]	+.8	+.1
San Francisco	+1.1	+2.9	+.2	+.2	[3]	+1.0	+.2
Seattle	+1.0	+2.2	[3]	+.8	−.1	+.5	+.2

[1] Based on data for 51 cities.
[2] Based on data for 34 cities.
[3] No change.

Housefurnishings.—Further increases in prices of many kinds of housefurnishings were widespread during the month. Furniture prices rose about seven-tenths of 1 percent, on the average, sheet prices more than 1 percent, and rug prices 1½ percent. Refrigerator prices were raised in 11 of the 20 cities surveyed. In Cincinnati and Pittsburgh, where the largest net advances in housefurnishing costs occurred, washing-machine prices were also raised.

Fuel oil and gasoline.—Retail prices of gasoline and fuel oil rose during the month, following earlier advances in wholesale markets. Thus, prices of gasoline moved up in 13 of the 20 cities surveyed, with especially large increases in Detroit and Houston. Prices of fuel oil increased in most cities along the North Atlantic seaboard, reflecting higher rates for shipping by tankers. This upswing reversed declines in February and March in the New England cities, where fuel oil is extensively used for heating by families with moderate incomes.

TABLE 2.—*Indexes of Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers in 20 Large Cities, by Groups of Items, April 15, 1941*

[Average 1935–39=100]

Area and city	All items	Food	Clothing	Rent	Fuel, electricity, and ice	Housefurnishings	Miscellaneous
Average: Large cities	102.2	[1] 100.6	102.3	105.4	[2] 100.9	102.2	102.2
New England: Boston	100.6	98.3	101.9	100.7	106.6	99.0	101.4
Middle Atlantic:							
Buffalo	104.1	103.2	102.2	109.3	99.7	103.4	103.8
New York	102.3	101.6	102.1	102.7	103.5	96.7	103.5
Philadelphia	100.4	97.0	101.8	104.4	99.7	103.2	102.0
Pittsburgh	102.2	101.1	102.3	105.8	104.0	104.2	100.1
East North Central:							
Chicago	102.5	100.5	100.5	109.3	100.3	104.0	101.1
Cincinnati	101.6	100.1	104.6	102.7	99.4	103.7	101.6
Cleveland	103.5	102.4	102.2	109.3	108.9	104.3	100.9
Detroit	103.4	101.3	102.6	109.7	98.3	103.1	103.1
West North Central:							
Kansas City	100.1	97.4	102.8	103.2	100.8	100.2	100.1
Minneapolis	102.6	101.5	102.1	108.3	96.4	103.8	102.4
St. Louis	101.9	101.4	103.1	101.5	102.8	98.5	102.6
South Atlantic:							
Baltimore	102.6	101.5	101.8	107.1	100.7	104.2	101.5
Savannah	102.5	103.0	102.2	105.8	96.9	103.7	101.5
East South Central: Birmingham	102.4	97.0	103.4	118.6	93.9	100.8	101.7
West South Central: Houston	103.2	104.2	103.4	107.1	93.1	106.7	101.3
Mountain: Denver	101.1	98.6	100.0	107.0	97.4	103.7	101.5
Pacific:							
Los Angeles	103.2	102.7	103.6	106.4	94.3	103.4	103.0
San Francisco	103.5	103.5	103.3	104.1	91.5	103.3	104.8
Seattle	104.0	104.7	103.8	109.0	94.9	99.0	103.4

[1] Based on data for 51 cities.
[2] Based on data for 34 cities.

EXPENDITURES OF BRITISH AGRICULTURAL WORKERS, 1937–38 [1]

WEEKLY expenditures of 1,491 agricultural workers' households in England, Wales, Scotland, and Northern Ireland averaged 57s. 4d.,[2] in the four representative weeks covered by the inquiry made by the Ministry of Labor in 1937–38. Expenditures of industrial workers, as shown by the same study, averaged 86s. 3d. weekly; data on these expenditures were given in the April 1941 issue of the Monthly Labor

[1] Great Britain, Ministry of Labor Gazette (London), January 1941.

[2] The computation of this total included substitution of an average weekly expenditure of 5s. 3d. for clothing and footwear, the indicated weekly expenditure over 12 months, for the weekly average of 5s. 10d. shown by the budgets for 4 weeks only.

Review, which also contained information on the scope and methods of the cost-of-living survey.

Of the items included in the agricultural family budget, food accounted for 27s. 9d., or 48 percent of the total; rent, including taxes, 4s. 9d., or 8 percent; clothing 5s. 3d., or 9 percent; fuel and light, 4s. 11d., or 9 percent; and "other items," 14s. 8d., or 26 percent.

Agricultural households for which reports were obtained covering all 4 weeks consisted of approximately 3.8 persons, of whom 2.4 were 18 years of age and over, and 1.1 under 14 years of age. The number of wage or salary earners averaged 1.6 per household. Working time in the period of the survey averaged slightly over 5½ days a week. Many of the supplementary earners in the households were engaged in nonagricultural occupations, that is, industrial, commercial, or other. The heads of the households were without exception in agricultural occupations and averaged about 5.9 days of work weekly.

Housing and Rents

Of the agricultural households, 95½ percent were either renting their dwellings or occupying shelter provided by their employers, the whole or a part of which was regarded as part of their wages. The average dwelling consisted of 4 rooms including kitchen but excluding sculleries, bathrooms, etc. Of the households occupying rented housing, three-fifths were renting direct at a cost of 5s. 4d. a week. The remaining two-fifths were furnished with dwellings by their employers, for which the average value was placed at 3s. 11d. weekly. About 4½ percent of the households were in dwellings that they owned or were buying. The average cost of payments, including taxes, water, rent, etc., came to 4s. 8d. The average expense for rent and related items of all groups, renters and owners, was 4s. 9d. weekly.

Food

Weekly food expenditures varied only slightly as between weeks. Of the 27s. 9d. spent, 26 percent was for meat, 20 percent for bread, cake, and cereals, 12 percent for fats, and nearly 9 percent for milk and cream. On the average, 15 pounds of bread per household were used weekly, 1.4 pounds of bacon, ham, etc., and 4.2 pounds of other meat, 8.3 pints of fresh whole milk, 1.6 pounds of butter, and 8.2 eggs. These figures cover food bought and do not include the value of quantities allowed by employers or grown in gardens.

The main items provided by employers were milk, potatoes, and oatmeal. Approximately 18 percent of the households received a regular allowance of milk from employers, amounting to 14 pints weekly on the average. From 12 to 13 percent received an allowance of potatoes averaging 27½ pounds a week. Five percent of the house-

holds, chiefly in Scotland, received an allowance averaging 13½ pounds of oatmeal weekly. Averaged over the 1,491 families covered by the survey, these allowances are the equivalent of about 2½ pints of milk, 3½ pounds of potatoes, and nearly ¾ pound of oatmeal a week.

Potatoes and eggs were the principal items produced in gardens and allotments. About one-half of the budgets showed some consumption of home-produced potatoes (about 15 pounds a week), and 20 percent of the households averaged 14 or 15 eggs weekly produced at home. These quantities are equivalent to 7½ pounds of potatoes and 3 eggs, weekly, for the 1,491 households. The other major items produced at home were vegetables and small quantities of fruit.

Other Expenditures

Clothing expenditures for a sample of 400 households, over 12 months, averaged 5s. 3d. weekly, as compared with 5s. 10d. weekly for the 4 weeks of the study. The Ministry of Labor states that the weekly totals for a long term more closely approximate expenditures for clothing and footwear (including repairs) by agricultural households than do the weekly returns for the period of the inquiry. Of the total weekly expenditure over 12 months, 31 percent was allotted to men's clothing, 26 percent to women's clothing and materials, 12 percent to clothing for children, and 30 percent to boots and shoes (including repairs).

Of the 4s. 11d. weekly expended for fuel and light, nearly 60 percent was for coal. About 6 percent of the households stated that they received weekly allowances of coal, averaging about 1½ cwt., but the coal allowed is not calculated in the totals of expenditures.

"Other items," accounting for 14s. 8d. a week, included 3s. 1d. for national and other insurance, pension funds, etc.; 1s. 11d. for tobacco and cigarettes; 1s. 2½d. for doctors, drugs, hospitals, etc.; and 6¼d. for trade-union subscriptions.

Summary

Expenditures are shown in the following table for industrial and agricultural households separately, by principal groups. Both the amount of money and the proportion of the total expended for individual items are given.

Average Weekly Expenditures of Industrial and Agricultural Households, by Principal Items, 1937–38

Item	Industrial households (average, 3.77 persons)		Agricultural households (average, 3.79 persons)	
	Amount	Percent	Amount	Percent
	s. *d.*		*s.* *d.*	
Grand total	85 0	100.0	57 4	100.0
Rent (or purchase instalments), rates, etc	10 10	12.7	4 9	8.3
Food	34 1	40.1	27 9	48.4
Bread and flour	3 6¼	4.1	4 2	7.3
Other cereals and cereal products	1 10	2.2	1 5¼	2.5
Meat, poultry, rabbits, etc	6 2¼	7.3	5 5¼	9.5
Bacon, ham, etc	1 11	2.3	1 8¾	3.0
Fish	1 4¾	1.7	0 9	1.3
Milk (fresh, condensed and dried) and cream	3 6¾	4.2	2 4½	4.1
Butter	2 5½	2.9	2 1¾	3.7
Margarine, lard, suet and other cooking fats	0 11¼	1.1	1 1½	2.0
Cheese	0 8¼	.8	0 10½	1.5
Eggs	1 10½	2.2	1 0½	1.8
Tea	1 7¾	1.9	1 6½	2.7
Sugar	1 0½	1.2	1 3½	2.3
Potatoes	1 1¾	1.3	0 5½	.8
Other vegetables (fresh, dried, canned, etc.)	1 4½	1.6	0 6	.9
Fruit (fresh, dried, canned, etc.) and nuts	1 9½	2.1	1 2¼	2.1
Other food	2 9	3.2	1 8¼	2.9
Clothing and footwear	8 1	9.5	5 3	9.1
Clothing and materials, including repairs, etc	6 0	7.1	3 8¼	6.4
Boots, shoes, etc., including repairs	2 1	2.4	1 6¾	2.7
Fuel and light	6 5	7.6	4 11	8.6
Coal and coke	3 3	3.8	2 11½	5.2
Gas and electricity	2 5¼	2.9	0 7¼	1.0
Other fuel and lighting	0 8¾	.9	1 4¼	2.4
Other items	25 7	30.1	14 8	25.6
Soap and other cleaning and polishing materials	1 1½	1.3	0 10¾	1.6
Household equipment	2 11½	3.5	1 5¼	2.5
Tobacco and cigarettes	2 6½	3.0	1 11	3.4
Traveling	2 3	2.6	0 10½	1.5
Newspapers and periodicals	1 0	1.2	0 9¾	1.4
Entertainments	1 4½	1.6	0 4¼	.6
Doctor, dentist, nursing, medicines, etc	1 8	2.0	1 2½	2.1
National Health, Pensions and Unemployment Insurance	2 0¾	2.4	1 7¾	2.9
Other insurances, pension funds, etc	2 4½	2.8	1 5¼	2.5
Trade-union subscriptions	1 4¼	1.6	0 6¼	.9
Other expenditure	6 10½	8.1	3 6¾	6.2

Industrial Disputes

RECENT STRIKES

PRELIMINARY estimates indicate 400 new strikes in April 1941 in which approximately 500,000 workers were involved. There were 7,800,000 mandays of idleness during all strikes in progress during the month. The general bituminous-coal stoppage which was in progress during the entire month and the Ford Motor Co. strike during early April accounted for approximately 85 percent of the total workers involved and man-days of idleness.

The number of strikes in April was about one-fifth greater than in March 1941, more than four times as many workers were involved in the April strikes, and there was more than five times as much idleness during strikes in April. Excluding the coal and Ford disputes, the number of workers involved in April strikes was one-fourth less than in March and the amount of idleness was nearly one-fifth less.

The number of strikes in April 1941 was about 37 percent greater than the 5-year average for April 1935 to 1939, approximately three times as many workers were involved, and the amount of idleness during strikes in April 1941 was approximately three and one-half times the 5-year average for April. The following figures show comparisons between the above-mentioned periods:

Strikes in March and April 1941, Compared with Averages of Preceding 5-Year Period

Item	April 1941 [1]	March 1941 [1]	April 1940	Averages for 5-year period, 1935–39	
				April	March
Number of strikes beginning in month	400	330	228	292	292
Number of workers involved in new strikes	500,000	113,000	39,481	165,928	103,740
Number of man-days idle during all strikes in progress during the month	7,800,000	1,400,000	441,866	2,199,274	1,394,625

[1] Preliminary estimates.

STRIKES IN FEBRUARY 1941 [1]

THERE was an increase of about 13 percent in number of strikes in February as compared with January 1941. The number of workers

[1] The Bureau's statistics on strikes exclude minor disputes lasting less than 1 day or involving fewer than six workers.

involved in new strikes, however, was only 76 percent as great as in January. The number of man-days idle in February was 69 percent greater than in January. More than one-fourth of the total idleness caused by strikes in February resulted from two strikes—the International Harvester and Allis-Chalmers strikes, referred to below—which began in January and were settled early in April by the newly appointed National Defense Mediation Board.

The level of strike activity was considerably higher than in February 1940. The number of strikes was greater by 40 percent, more than twice as many workers were involved, and the amount of idleness resulting from strikes was 286 percent greater. Although there were more strikes in February 1941 than in February 1937—the peak year in recent strike activity—there were fewer workers involved and less idleness. Strikes were greater in number by 14 percent but there were only 69 percent as many workers involved and only 75 percent as much idleness caused by strikes.

TABLE 1.—*Trend of Strikes, 1935 to February 1941*

Year and month	Number of strikes			Workers involved in strikes			Man-days idle during month or year
	Beginning in month or year	In progress during month	Ending in month	Beginning in month or year	In progress during month	Ending in month	
1935	2,014			1,117,213			15,456,337
1936	2,172			788,648			13,901,956
1937	4,740			1,860,621			28,424,857
1938	2,772			688,376			9,148,273
1939	2,613			1,170,962			17,812,219
1940	2,508			576,988			6,700,872
1940							
January	128	222	124	26,937	41,284	32,743	246,674
February	172	270	153	29,509	38,050	17,252	289,992
March	178	295	187	22,433	43,231	29,593	386,981
April	228	336	214	39,481	53,119	29,226	441,866
May	239	361	239	53,231	77,124	59,263	665,688
June	214	336	190	38,542	56,403	36,559	484,007
July	244	390	227	63,126	82,970	54,100	585,651
August	231	394	253	61,356	90,226	47,199	706,308
September	253	394	242	65,362	108,389	72,523	780,570
October	267	419	253	71,997	107,863	68,730	915,014
November	207	373	243	62,399	101,532	82,571	739,807
December	147	277	168	42,615	61,576	43,605	458,314
1941 [1]							
January	213	322	205	90,141	108,112	52,868	662,221
February	241	358	221	68,881	124,125	64,380	1,120,128

[1] Succeeding reports may show slightly different figures for the various months due to corrections and additions made as later information is received.

International Harvester strike.—The strike at plants of the International Harvester Co. in Illinois and Indiana involved more than 15,000 workers at its peak. Conducted by the Farm Equipment Workers Organizing Committee (C. I. O.), it began January 17, 1941, at the company's plant in East Moline, Ill. By the end of January production had stopped at the company's Rock Falls, Ill., plant and at the large tractor works in Chicago. During the latter half of

February, employees at the Richmond, Ind., plant and the McCormick works in Chicago were called out.

The principal demand was for recognition of the Farm Equipment Workers Organizing Committee as bargaining agent. Some wage adjustments and the abolishment of the company's piece-work system were also requested. The company had been dealing with plant organizations—groups which the union had charged in complaints to the National Labor Relations Board were company dominated—and refused to recognize the Farm Equipment Workers unless ordered by the Board to do so. The East Moline, Ill., employees voted on January 27 to return to work pending settlement negotiations with the company, but workers at the other plants remained on strike. On February 8 the National Labor Relations Board ordered the company to disestablish what were found to be company-dominated organizations and to cease interfering with the rights of its employees to organize.

After repeated attempts of Government conciliators to settle the dispute, it was certified to the National Defense Mediation Board by the Secretary of Labor on March 27. The Board immediately requested that production be resumed while the issues were being mediated. This plan was accepted and work was resumed on March 31. Two days later the company, the union, and representatives of the Mediation Board signed an agreement by the terms of which production was to continue pending a recommendation for settlement from the Board; the striking employees were to be taken back to work without loss of seniority rights and privileges; and the National Labor Relations Board was to be asked to make the earliest possible determination of the appropriate bargaining agencies.

Allis-Chalmers strike.—More than 7,500 workers were involved in the Allis-Chalmers Manufacturing Co. strike at West Allis, Wis., which began January 22 and continued until April 7. The union involved—United Automobile Workers of America (C. I. O.)—had previously had an agreement with the company, which expired in the spring of 1940. In May 1940 terms of a new contract were tentatively agreed upon although an agreement was never signed.

During the ensuing months charges of favoritism toward nonunion and A. F. of L. men were made against the company and the union alleged that the firm was trying to undermine and weaken its position. When the strike began in January this became the most important issue, the union demanding some kind of security clause in a contract which would maintain or increase its strength and the company refusing to accept any terms which would require employees to become or remain members of the union.

Negotiations under direction of Department of Labor conciliators failed to bring about a settlement and officials of the company and

union came to Washington for conferences with directors of the Office of Production Management, at the request of the latter. On February 15 announcement was made that the negotiators had reached an agreement, subject to ratification by both parties, which provided that work should be resumed and a referee be appointed to adjudicate all disputes.

Before this agreement was presented to the union members, however, a dispute developed between the parties as to whether the terms were to be interpreted as requiring the discipline of any employee who failed to maintain his union membership. The proposed terms were accepted by the union members on March 3 without qualification. The strike continued, however, when the company qualified its acceptance by the condition that the terms should not "be construed or applied as a closed shop or all union shop or maintenance of membership agreement."

Thereafter, the Wisconsin Employment Relations Board found that a number of fraudulent ballots had been cast when the strike had originally been voted upon. The strike had been favored, however, by a substantial majority of those actually voting and there was no apparent weakening of the members' determination to continue the strike after the Board's findings were published.

On March 26, with the strike in its tenth week and vitally affecting delivery of defense materials, the Secretary of the Navy and the Director General of the Office of Production Management sent joint telegrams to the company and union, insisting that operations be resumed immediately so that further negotiations could be carried on while the men were at work. The company announced opening of its plant, but the union at a mass meeting voted to continue the strike until an agreement had been reached. For the first time mass picket lines were formed and the first violence of the strike occurred.

On April 3, the dispute was certified by the Secretary of Labor to the National Defense Mediation Board. Representatives of the company and union were called to Washington where an agreement for resumption of work was reached on April 6. This was ratified by the union the next day and production was resumed immediately.

The terms of settlement provided that all employees on the company pay roll when the strike began should be restored to their jobs without discrimination; there are to be no strikes or lock-outs during the life of the agreement, which is to be in effect for 1 year. An impartial referee is provided who shall arbitrate all disputes arising under the contract, including charges of discrimination or favoritism which affect union security.

Analysis of February Strikes

Table 2 shows strike activity in January and February in terms of percentages that workers involved and man-days idle in strikes are of total number of workers employed and man-days' work available, in all industries combined and in certain selected industries and groups. Less than one-half of 1 percent of the total employed workers were involved in strikes in either January or February. In all manufacturing industries a little less than 1 percent of the employed workers were involved in strikes during January and in February 1.09 percent were involved. In January 2.63 and in February 3.03 percent of the employed workers in the machinery manufacturing industries were involved in strikes. The International Harvester and Allis-Chalmers strikes, in progress during both months, accounted for a large proportion of these.

TABLE 2.—*Workers Involved and Man-Days Idle in Strikes, January and February 1941, Compared with Workers Employed and Time Worked*

Industry or group	January 1941		February 1941	
	Percent of employed workers [1] involved in strikes during month	Man-days idle during strikes as percentage of total man-days of work [2] available	Percent of employed workers [1] involved in strikes during month	Man-days idle during strikes as percentage of total man-days of work [2] available
All industries	0.41	0.11	0.47	0.21
All manufacturing groups	.95	.26	1.09	.47
Iron, steel, and their products, excluding machinery	.47	.11	2.18	.35
Machinery, excluding transportation equipment	2.63	.64	3.03	1.65
Transportation equipment	2.26	.50	1.03	.37
Nonferrous metals and their products	1.15	.19	.93	.11
Lumber and allied products	.68	.41	.51	.35
Stone, clay, and glass products	1.88	.58	.69	.37
Textiles and their products	.45	.15	.64	.25
Leather and its manufactures	.62	.16	.62	.06
Food and kindred products	.34	.11	.40	.27
Tobacco manufactures	0	0	0	0
Paper and printing	.18	.03	.12	.06
Chemicals and allied products	.07	.01	.21	.13
Rubber products	.57	.07	1.15	.72
Building and construction	.16	.05	.10	.04
Mining:				
Anthracite	.90	.16	4.24	.50
Bituminous coal	.87	.25	.16	.08
Metalliferous	.07	.05	.74	.22
Quarrying and nonmetallic	0	0	0	0

[1] "Employed workers" as used here includes all workers except those in occupations and professions where strikes rarely, if ever, occur. In general, the term "employed workers" includes all employees except the following groups: Government workers, agricultural wage earners on farms employing less than 6, managerial and supervisory employees, and certain groups which because of the nature of their work cannot or do not strike, such as teachers, clergymen, and domestic servants. Self-employed and unemployed persons are, of course, excluded.

[2] "Total man-days of work available" was estimated for purposes of this table by multiplying the total employed workers in each industry or group by the number of days worked by most employees in the respective groups.

The total amount of idleness resulting from strikes in January amounted to 0.11 percent of the total available man-days of work, and the idleness in February amounted to 0.21 percent. A large proportion of the idleness was in the manufacturing industries where idleness caused by strikes in January amounted to 0.26 percent of the available man-days of work and in February to 0.47 percent.

In the building and construction industry 0.16 percent of the employed workers were involved in strikes during January and 0.10 percent in February. These were short strikes on the average, the idleness resulting from strikes in this industry amounting to only 0.05 percent of total working time in January and 0.04 percent in February. In the mining industries 0.71 percent of the employed workers were involved in strikes each month. The idleness during January amounted to 0.20 percent and in February to 0.15 percent of the total time worked. In February more than 4 percent of the anthracite workers were involved in strikes, due largely to 1-day stoppages at two collieries of the Glen Alden Coal Co. in eastern Pennsylvania.

The machinery-manufacturing industries, with nearly 483,000, had more man-days of idleness caused by strikes in February than any other industry group. The International Harvester and Allis-Chalmers strikes were largely responsible for this. There were slightly more than 100,000 man-days of idleness in agriculture principally as a result of the strike of lemon pickers in Ventura County, California, which began January 30 and was still in progress at the end of February. There were 88,000 man-days of idleness in the textile industries, nearly 78,000 in trade, and about the same number in the iron and steel industries. (See table 3.)

More than 22,000 workers were involved in the iron and steel industry strikes beginning in February. Over half of these were involved in the 2-day strike at the Bethlehem Steel Co. plant at Lackawanna, N. Y. About 9,900 were involved in textile strikes, 7,500 in strikes at machinery-manufacturing plants, 6,700 in strikes at plants manufacturing transportation equipment, and 4,000 in mining strikes.

The textile industries, with 38, had more new strikes than any other industry group during February. There were 26 in trade, 21 in machinery manufacturing, 20 in building and construction, and 19 in the iron and steel industries.

In the 12-month period ending with February 1941, the greatest amounts of idleness caused by strikes were in machinery manufacturing, the lumber industries, and textiles. During the preceding year the greatest amounts were in mining, transportation equipment, manufacturing, and textiles.

TABLE 3.—*Strikes in February 1941, by Industry, With Comparative Man-Day Figures for Preceding 2 Years*

Industry	February 1941			Number of man-days idle during 12-month period ending with—	
	Strikes beginning in month		Number of man-days idle during month	February 1941	February 1940
	Number	Workers involved			
All industries	**241**	**68,881**	**1,120,128**	**7,944,155**	**17,282,287**
Iron, steel, and their products, excluding machinery	**19**	**22,604**	**77,530**	**460,655**	**232,055**
Blast furnaces, steel works, and rolling mills	11	20,010	46,023	175,840	84,861
Bolts, nuts, washers, and rivets	1	115	805	1,054	
Cast-iron pipe and fittings			5,000	37,742	29,093
Cutlery (not including silver and plated cutlery) and edge tools				864	152
Forgings, iron and steel				4,090	6,062
Hardware	1	36	366	5,091	27,022
Plumbers' supplies and fixtures	1	717	3,493	33,833	1,475
Steam and hot-water heating apparatus and steam fittings				23,781	2,393
Stoves	2	698	10,798	32,918	22,105
Structural and ornamental metal-work	1	65	65	18,557	1,075
Tin cans and other tinware				19,040	14,410
Tools (not including edge tools, machine tools, files, and saws)				5,008	101
Wire and wire products	2	963	5,640	13,167	13,352
Other			5,340	89,670	29,954
Machinery, excluding transportation equipment	**21**	**7,483**	**482,732**	**1,429,560**	**419,409**
Agricultural implements			158,740	204,579	12,347
Cash registers, adding machines, and typewriters			51,804	56,772	153
Electrical machinery, apparatus, and supplies	7	3,143	63,626	499,192	77,865
Engines, turbines, tractors, and water wheels	1	235	2,115	9,549	125,070
Foundry and machine-shop products	9	3,077	186,746	500,529	113,603
Machine tools (power driven)	1	120	12,240	29,256	6,668
Radios and phonographs	1	610	6,375	27,904	393
Other	2	298	1,086	101,779	83,310
Transportation equipment	**8**	**6,684**	**64,830**	**396,503**	**2,661,174**
Aircraft	2	250	1,100	45,583	85,681
Automobiles, bodies and parts	5	6,157	27,196	161,689	2,523,404
Cars, electric- and steam-railroad			34,595	108,554	21,698
Shipbuilding	1	277	1,939	74,965	28,215
Other				5,712	2,176
Nonferrous metals and their products	**5**	**1,399**	**7,205**	**269,403**	**168,798**
Aluminum manufactures				30,866	95
Brass, bronze, and copper products			1,550	7,248	33,832
Clocks, watches, and other time-recording devices	1	30	60	192	10,726
Jewelry				9,720	3,452
Lighting equipment				6,384	8,061
Silverware and plated ware				47,740	1,925
Smelting and refining—copper, lead, and zinc	1	950	1,900	49,664	97,514
Stamped and enameled ware			1,380	53,753	6,243
Other	3	419	2,315	63,836	6,950
Lumber and allied products	**16**	**1,479**	**45,273**	**871,075**	**763,082**
Furniture	6	454	17,123	261,385	152,494
Millwork and planing	2	48	1,939	66,328	154,308
Sawmills and logging camps	5	538	22,571	407,045	357,781
Other	3	439	3,640	136,317	98,499
Stone, clay, and glass products	**7**	**1,506**	**22,801**	**229,936**	**173,229**
Brick, tile, and terra cotta	2	709	15,953	80,210	56,790
Cement				31,242	576
Glass	1	73	365	48,669	41,640
Marble, granite, slate, and other products				546	27,322
Pottery	3	679	5,853	27,078	3,176
Other	1	45	630	42,191	43,725
Textiles and their products	**38**	**9,902**	**88,233**	**753,238**	**1,109,699**
Fabrics	13	4,214	41,067	341,611	561,421
Carpets and rugs				3,826	3,871
Cotton goods	2	1,098	19,088	157,922	332,286
Cotton small wares				753	3,376
Dyeing and finishing textiles	3	1,418	10,048	34,453	17,892
Silk and rayon goods	1	21	42	59,710	72,147
Woolen and worsted goods	4	1,195	1,722	31,115	43,764
Other	3	482	10,167	53,832	88,085

TABLE 3.—*Strikes in February 1941, by Industry, With Comparative Man-Day Figures for Preceding 2 Years*—Continued

Industry	February 1941			Number of man-days idle during 12-month period ending with—	
	Strikes beginning in month		Number of man-days idle during month	February 1941	February 1940
	Number	Workers involved			
Textiles and their products—Continued.					
Wearing apparel	25	5,688	47,166	411,627	548,278
Clothing, men's				30,446	40,110
Clothing, women's	18	1,356	9,059	158,188	303,064
Corsets and allied garments			1,050	6,255	2,800
Men's furnishings	1	805	7,245	8,470	24,788
Hats, caps, and millinery	2	1,015	2,028	44,177	18,376
Shirts and collars	1	1,800	13,620	15,465	17,942
Hosiery				77,695	63,963
Knit goods	3	712	14,164	48,343	52,087
Other				22,588	25,148
Leather and its manufactures	**2**	**821**	**4,030**	**109,554**	**197,346**
Boots and shoes	2	821	4,030	45,866	107,393
Leather				20,966	24,971
Other leather goods				42,722	64,982
Food and kindred products	**14**	**1,630**	**42,605**	**205,268**	**353,329**
Baking	1	6	694	28,397	33,560
Beverages	2	81	775	6,553	16,806
Butter	1	122	366	930	31
Canning and preserving	1	14	774	43,404	102,830
Confectionery	2	216	10,335	27,718	13,995
Flour and grain mills	1	120	1,104	7,554	5,940
Ice cream					340
Slaughtering and meat packing	2	800	9,227	41,469	85,476
Sugar refining, cane			15,922	16,679	85,788
Other	4	271	3,408	32,564	8,563
Tobacco manufactures				**77,959**	**74,452**
Chewing and smoking tobacco and snuff				18	
Cigars				77,941	45,948
Cigarettes					28,504
Paper and printing	**6**	**733**	**7,521**	**107,872**	**138,130**
Boxes, paper	4	533	4,395	40,748	79,199
Paper and pulp				17,009	14,220
Printing and publishing:					
Book and job			240	8,395	2,939
Newspapers and periodicals	1	40	200	13,748	18,482
Other	1	160	2,686	27,972	23,200
Chemicals and allied products	**5**	**798**	**11,005**	**190,982**	**371,263**
Chemicals				11,095	18,472
Cottonseed—oil, cake, and meal	1	85	1,275	1,661	13,885
Druggists' preparations	1	20	200	1,242	204
Explosives				2,232	801
Fertilizers				401	3,090
Paints and varnishes	1	9	1,563	12,214	4,901
Petroleum refining				9,747	59,550
Rayon and allied products				85,000	234,050
Soap				500	12,724
Other	2	684	7,967	66,890	23,586
Rubber products	**4**	**866**	**19,443**	**118,771**	**56,388**
Rubber boots and shoes	1	750	3,750	4,440	
Rubber tires and inner tubes			14,441	93,739	8,902
Other rubber goods	3	116	1,252	20,592	47,486
Miscellaneous manufacturing	**6**	**699**	**9,718**	**230,495**	**152,563**
Electric light, power, and manufactured gas				2,268	11,358
Broom and brush				10,283	3,303
Furriers and fur factories				20,792	29,997
Other	6	699	9,718	197,152	107,905
Extraction of minerals	**5**	**4,014**	**14,830**	**276,356**	**7,411,079**
Coal mining, anthracite	3	3,011	5,815	103,219	70,831
Coal mining, bituminous	1	468	5,518	161,018	7,281,390
Metalliferous mining	1	535	3,497	6,737	46,482
Quarrying and nonmetallic mining				3,220	8,706
Other				2,162	3,670

TABLE 3.—*Strikes in February 1941, by Industry, With Comparative Man-Day Figures for Preceding 2 Years*—Continued

Industry	February 1941			Number of man-days idle during 12-month period ending with—	
	Strikes beginning in month		Number of man-days idle during month	February 1941	February 1940
	Number	Workers involved			
Transportation and communication	**14**	**2,010**	**10,189**	**560,881**	778,010
Water transportation	2	243	1,065	149,247	513,811
Motortruck transportation	6	789	6,480	158,198	178,779
Motorbus transportation	2	622	697	11,481	10,793
Taxicabs and miscellaneous	3	288	1,811	222,580	51,648
Electric railroad				10,841	18
Steam railroad	1	68	136	704	
Telephone and telegraph				7,196	19,848
Air transportation					2,098
Radio broadcasting and transmitting				634	985
Other					30
Trade	**26**	**2,451**	**77,827**	**696,735**	425,454
Wholesale	11	1,198	17,957	116,212	88,998
Retail	15	1,253	59,870	580,523	336,456
Domestic and personal service	**15**	**1,061**	**8,573**	**108,194**	267,609
Hotels, restaurants, and boarding houses	9	347	2,408	63,479	71,341
Personal service, barbers, beauty parlors				3,562	1,104
Laundries	5	344	4,086	24,634	104,904
Dyeing, cleaning, and pressing	1	400	400	10,306	78,216
Elevator and maintenance workers (when not attached to specific industry)			1,679	5,142	10,691
Other				1,071	1,353
Professional service	**2**	**32**	**372**	**17,076**	35,279
Recreation and amusement	2	32	372	14,037	26,000
Professional				1,614	3,778
Semiprofessional, attendants, and helpers				1,425	5,501
Building and construction	**20**	**939**	**12,744**	**502,348**	559,328
Buildings, exclusive of PWA	16	732	10,756	417,635	420,203
All other construction (bridges, docks, etc., and PWA Buildings)	4	207	1,988	84,713	139,125
Agriculture and fishing	**3**	**164**	**102,968**	**261,984**	480,497
Agriculture	2	72	101,572	144,056	194,664
Fishing	1	92	1,396	117,928	285,833
WPA relief, and resettlement projects				**5,214**	421,521
Other nonmanufacturing industries	**5**	**1,576**	**9,699**	**64,096**	32,593

New York had more new strikes (55) in February than any other State. California was next in order with 24, and Pennsylvania and Ohio had 22 and 19, respectively. New York also had more workers involved in new strikes than any other State although there was only one large strike in New York, the Bethlehem Steel Co. plant in Lackawanna, which involved about 12,000 workers. This occurred during the latter part of February and lasted only 2 days.

Wisconsin had more man-days of idleness (162,500) because of strikes during February than any other State, largely as a result of the continuation of the strike at the Allis-Chalmers Manufacturing Co. Illinois had almost as many man-days of idleness (160,700), being affected throughout the month by the strike at the International Harvester Co. plants.

During the 12-month period ending with February 1941, New York had 1,390,000 man-days of idleness, which was considerably more than in any other State. Pennsylvania had 918,000, Illinois 620,000, and California 595,000. In the previous 12-month period there were more than 3,000,000 man-days of idleness in Pennsylvania, 2,000,000 in West Virginia and Michigan, and 1,000,000 in New York and Kentucky. The large bituminous-coal stoppage of April 1939 accounted largely for the great amount of idleness in all of these States except New York. (See table 4.)

In the 454 strikes beginning in January and February, there was an average of 350 workers per strike, while in the 241 strikes which began in February alone, the average was 286 workers. About 56 percent of the strikes beginning in the 2 months involved less than 100 workers each, 38 percent involved 100 to 1,000 workers each, and 6 percent involved over 1,000 workers each. The two largest strikes were the International Harvester strike and the Bethlehem Steel strike at Lackawanna, N. Y. (See table 5.)

Of the 241 strikes beginning in February, union-organization matters were the principal issues in 55 percent which included about 53 percent of the total workers involved. Wages and hours were the principal issues in 30 percent of the total strikes which included about the same proportion of the total workers involved. Jurisdiction, union rivalry, and various grievances over working conditions accounted for 15 percent of the strikes, including 18 percent of the workers involved. The largest stoppage in the latter group involved over 2,000 employees in the Lansing, Mich., plant of the Fisher Body Corp. because of alleged speed-up.

About 52 percent of the 454 strikes which began in January and February were over union-organization matters principally, 30 percent were over wage-and-hour issues, and about 18 percent were due to other issues. There were 159,000 workers involved in the strikes beginning during the 2 months. Over half (52 percent) were involved in the union-organization disputes, 28 percent were in the wage-and-hour strikes, and 20 percent were in strikes over other issues. (See table 6.)

TABLE 4.—*Strikes in February 1941, by States, With Comparative Man-Day Figures for Preceding 2 Years*

State	Strikes beginning in February 1941		Number of man-days idle during February	Number of man-days idle during 12-month period ending with—	
	Number	Workers involved		February 1941	February 1940
All States	[1] 241	68,881	1,120,128	7,944,155	17,282,287
Alabama	2	493	13,590	72,239	473,819
Arizona			32	12,969	8,619
Arkansas	1	30	121	79,749	42,011
California	24	2,202	144,071	595,026	933,849
Colorado	2	124	1,045	4,276	73,769
Connecticut	5	906	66,616	136,049	94,775
Delaware	2	206	13,033	40,627	3,768
District of Columbia	2	171	356	18,831	63,795
Florida	5	525	2,872	84,973	93,154
Georgia	2	850	6,772	43,984	74,292
Idaho			1,587	5,617	1,558
Illinois	8	981	160,757	620,265	600,705
Indiana	8	4,209	72,647	398,730	355,741
Iowa	2	121	8,570	41,215	83,341
Kansas				8,977	29,931
Kentucky	2	177	2,200	76,542	1,227,904
Louisiana	1	106	1,908	48,177	26,540
Maine	2	142	509	6,766	9,021
Maryland	6	2,950	36,549	175,923	275,059
Massachusetts	12	2,286	18,003	250,352	331,244
Michigan	13	8,098	44,611	266,807	2,476,317
Minnesota	1	6	18	93,995	97,993
Mississippi				16,661	39,196
Missouri	5	259	5,009	253,210	246,403
Montana			27	7,446	21,179
Nebraska				1,616	7,954
Nevada				1,056	850
New Hampshire				6,684	10,788
New Jersey	18	3,096	21,187	403,892	442,246
New Mexico				6,041	20,540
New York	55	21,247	158,436	1,390,540	1,098,435
North Carolina			580	95,664	101,502
North Dakota				1,537	18,400
Ohio	19	6,017	71,517	430,015	760,386
Oklahoma	1	13	1,162	4,792	59,529
Oregon	3	302	14,917	153,373	134,911
Pennsylvania	22	10,385	47,883	918,321	3,021,112
Rhode Island	1	82	656	45,110	110,926
South Carolina				72,343	111,576
South Dakota				90	373
Tennessee	6	1,067	7,288	43,140	241,686
Texas	1	15	6,648	92,341	148,427
Utah	1	73	292	1,884	38,483
Vermont				2,921	8,180
Virginia	6	680	5,331	125,568	328,809
Washington	4	186	20,194	423,475	410,746
West Virginia	2	101	579	37,052	2,170,374
Wisconsin	2	775	162,555	327,144	332,071
Wyoming				150	20,000

[1] The sum of this column is more than 241. This is due to the fact that 11 strikes which extended across State lines have been counted in this table as separate strikes in each State affected, with the proper allocation of number of workers involved and man-days idle.

TABLE 5.—*Strikes Beginning in January and February of 1941, by Industry Group and Number of Workers Involved*

Industry group	Total	Number of strikes in which the number of workers involved was—							
		6 and under 20	20 and under 100	100 and under 250	250 and under 500	500 and under 1,000	1,000 and under 5,000	5,000 and under 10,000	10,000 and over
All industries	454	84	168	85	41	48	25	1	2
Manufacturing									
Iron, steel and their products, excluding machinery	35	2	9	5	6	9	3	------	1
Machinery, excluding transportation equipment	40	1	12	9	7	7	2	1	1
Transportation equipment	23	1	2	7	1	5	7	------	------
Nonferrous metals and their products	10	3	2	2	------	1	2	------	------
Lumber and allied products	29	5	12	8	2	2	------	------	------
Stone, clay, and glass products	15	------	6	4	2	1	2	------	------
Textiles and their products	58	10	20	11	8	7	2	------	------
Leather and its manufactures	5	------	1	------	1	3	------	------	------
Food and kindred products	26	4	13	6	1	2	------	------	------
Paper and printing	11	2	3	5	------	1	------	------	------
Chemicals and allied products	9	2	4	1	2	------	------	------	------
Rubber products	7	2	2	1	------	2	------	------	------
Miscellaneous manufacturing	12	2	6	2	------	2	------	------	------
Nonmanufacturing									
Extraction of minerals	16	------	4	2	3	4	3	------	------
Transportation and communication	24	5	11	6	1	1	------	------	------
Trade	43	18	16	5	3	1	------	------	------
Domestic and personal service	24	8	13	2	1	------	------	------	------
Professional service	4	2	1	1	------	------	------	------	------
Building and construction	46	15	22	6	3	------	------	------	------
Agriculture and fishing	5	------	3	------	------	------	2	------	------
Other nonmanufacturing industries	12	2	6	2	------	------	2	------	------

TABLE 6.—*Strikes Beginning in February 1941, by Major Issues Involved, With Cumulative Figures for January and February 1941*

Major issue	Strikes beginning in February 1941				Strikes beginning in January and February 1941			
	Number	Percent of total	Workers involved	Percent of total	Number	Percent of total	Workers involved	Percent of total
All issues	241	100.0	68,881	100.0	454	100.0	159,022	100.0
Wages and hours	72	29.9	20,373	29.6	136	30.0	44,889	28.2
Wage increase	56	23.3	17,707	25.7	110	24.3	40,419	25.4
Wage decrease	6	2.5	825	1.2	9	2.0	1,960	1.2
Wage increase, hour decrease	7	2.9	1,620	2.4	12	2.6	2,231	1.4
Wage decrease, hour increase	1	.4	7	(1)	1	.2	7	(1)
Hour increase	------	------	------	------	1	.2	18	(1)
Hour decrease	2	.8	214	.3	3	.7	254	.2
Union organization	133	55.2	36,151	52.5	238	52.4	82,504	51.9
Recognition	24	10.0	1,998	2.9	46	10.1	21,855	13.7
Recognition and wages	58	24.0	22,220	32.4	85	18.7	32,821	20.7
Recognition, wages, and hours	17	7.1	1,811	2.6	30	6.6	2,549	1.6
Closed or union shop	13	5.4	4,421	6.4	33	7.3	14,790	9.3
Discrimination	10	4.1	915	1.3	28	6.2	4,815	3.0
Strengthening bargaining position	6	2.5	3,864	5.6	7	1.5	3,939	2.5
Other	5	2.1	922	1.3	9	2.0	1,735	1.1
Miscellaneous	36	14.9	12,357	17.9	80	17.6	31,629	19.9
Sympathy	3	1.2	229	.3	4	.9	240	.2
Rival unions or factions	10	4.1	3,539	5.1	19	4.2	8,636	5.4
Jurisdiction [2]	5	2.1	670	1.0	14	3.1	1,036	.7
Other	14	5.8	7,675	11.1	38	8.3	21,376	13.4
Not reported	4	1.7	244	.4	5	1.1	341	.2

[1] Less than a tenth of 1 percent.

[2] It is probable that the figures here given do not include all jurisdictional strikes. Due to the local nature of these disputes, it is difficult for the Bureau to find out about all of them.

The affiliations of the unions involved in strikes beginning in January and February are shown in table 7. American Federation of Labor organizations were involved in 54 percent of the strikes which included 28 percent of the workers. Unions affiliated with the Congress of Industrial Organizations were involved in 37 percent of the strikes, but these included 63 percent of the total workers involved. Strikes in which no union was involved amounted to only 3 percent of the total and involved less than 2 percent of the workers. Among the largest strikes in this latter group was a wage dispute in a Federalsburg, Md., button factory, which involved over 500 workers.

TABLE 7.—*Strikes Beginning in January and February 1941, by Affiliations of Labor Organizations Involved*

Labor organization involved	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
Total	454	100.0	159,022	100.0
American Federation of Labor	245	54.0	44,518	28.0
Congress of Industrial Organizations	167	36.8	99,479	62.7
Unaffiliated unions	5	1.1	4,482	2.8
Railroad brotherhoods	1	.2	68	(1)
Two rival unions	16	3.5	7,206	4.5
Company unions	2	.4	630	.4
No organization	13	2.9	2,558	1.6
Organization involved, but type not reported	2	.4	32	(1)
Not reported	3	.7	49	(1)

[1] Less than a tenth of 1 percent.

The 426 strikes which ended in January and February had an average duration of about 20 calendar days. Approximately 44 percent of them were terminated in less than a week, 38 percent lasted from a week up to a month, 12 percent were in effect from 1 to 3 months, and about 6 percent (24 strikes) had been in progress 3 months or more. Most of the strikes in the latter group were small, only three of them involving as many as 200 workers. Among the largest of these was a strike at the Wabash Portland Cement Co. in Osborn, Ohio, which began in October and was settled late in January with the signing of an agreement.

TABLE 8.—*Strikes Ending in January and February 1941, by Industry Group and Duration*

Industry group	Total	Number of strikes with duration of—					
		Less than 1 week	1 week and less than ½ month	½ and less than 1 month	1 and less than 2 months	2 and less than 3 months	3 months or more
All industries	426	187	98	65	41	11	24
Manufacturing							
Iron, steel, and their products, excluding machinery	29	20	6	1	1	----	1
Machinery excluding transportation equipment	28	14	8	3	2	1	----
Transportation equipment	25	10	11	1	3	----	----
Nonferrous metals and their products	9	5	1	----	1	1	1
Lumber and allied products	31	8	5	10	5	----	3
Stone, clay, and glass products	15	7	4	2	----	----	2
Textiles and their products	47	24	6	8	5	1	3
Leather and its manufactures	5	2	3	----	----	----	----
Food and kindred products	27	5	8	5	6	1	2
Paper and printing	11	5	1	3	1	1	----
Chemicals and allied products	5	2	2	1	----	----	----
Rubber products	5	4	----	----	----	----	1
Miscellaneous manufacturing	15	3	1	5	3	2	1
Nonmanufacturing							
Extraction of minerals	17	9	4	2	----	1	1
Transportation equipment	22	9	6	4	1	1	1
Trade	42	13	11	9	5	2	2
Domestic and personal service	23	13	4	1	1	----	4
Professional service	5	4	----	1	----	----	----
Building and construction	49	24	11	8	5	----	1
Agriculture and fishing	2	1	1	----	----	----	----
WPA, relief, and resettlement projects	1	----	----	----	----	----	1
Other nonmanufacturing industries	13	5	5	1	2	----	----

About 47 percent of the strikes which ended in January and February were settled with the assistance of Government officials or boards. These strikes included about 63 percent of the total workers involved. Settlements were reached by direct negotiations between the employers and union representatives in 37 percent of the strikes which included 28 percent of the total workers involved. Twelve percent of the strikes, including about 7 percent of the workers, were terminated without formal settlement. In most of these strikes the workers either returned to work without settlement of the disputed issues, or they lost their jobs entirely when the company hired new workers, moved, or went out of business.

TABLE 9.—*Methods of Negotiating Settlements of Strikes Ending in January and February 1941*

Agency which carried on settlement negotiations	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
All agencies	426	100.0	117,248	100.0
Employers and workers directly	11	2.6	2,206	1.9
Employers and representatives of organized workers directly	156	36.6	32,614	27.8
Government officials or boards	201	47.2	73,192	62.5
Private conciliators or arbitrators	7	1.6	1,339	1.1
Terminated without formal settlement	51	12.0	7,897	6.7

In about 39 percent of the strikes ending in January and February the workers won substantially all their demands while 35 percent were settled on a compromise basis. The latter group included over half (54 percent) of the workers involved in strikes ending in the 2 months, as compared with 24 percent in the successful strikes. Sixteen percent of the strikes, including about 11 percent of the workers, resulted in little or no gains to the workers.

TABLE 10.—*Results of Strikes Ending in January and February 1941*

Result	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
Total	426	100.0	117,248	100.0
Substantial gains to workers	164	38.6	27,558	23.5
Partial gains or compromises	151	35.4	63,677	54.2
Little or no gains to workers	68	16.0	12,726	10.9
Jurisdiction, rival union, or faction settlements	33	7.7	8,791	7.5
Indeterminate	6	1.4	4,182	3.6
Not reported	4	.9	314	.3

In more than half of the 426 strikes ending in January and February the principal issues were union-organization matters. About 45 percent of these strikes were substantially won by the workers, 34 percent were compromised, and 19 percent brought little or no gains. In the wage-and-hour disputes terminated during the 2 months, the workers substantially won about 40 percent, obtained compromise settlements in 45 percent, and failed to win their demands in 15 percent.

Of the 49,848 workers involved in the union-organization strikes ending in the 2-month period, about 29 percent substantially won their demands, 64 percent obtained compromise settlements, and 6 percent made little or no gains. The same proportion (29 percent) of the workers in the wage-and-hour disputes won their demands, 58 percent obtained compromise settlements, and 13 percent made little or no gains.

TABLE 11.—*Results of Strikes Ending in January and February 1941, in Relation to Major Issues Involved*

Major issue	Total	Strikes resulting in—					
		Substantial gains to workers	Partial gains or compromises	Little or no gains to workers	Jurisdiction, rival union, or faction settlements	Indeterminate	Not reported
	Number of strikes						
All issues	426	164	151	68	33	6	4
Wages and hours	124	49	56	19	----	----	----
Union organization	220	100	75	42	----	3	----
Miscellaneous	82	15	20	7	33	3	4
	Percentage distribution						
All issues	100.0	38.6	35.4	16.0	7.7	1.4	0.9
Wages and hours	100.0	39.5	45.2	15.3	----	----	----
Union organization	100.0	45.4	34.1	19.1	----	1.4	----
Miscellaneous	100.0	18.3	24.4	8.5	40.2	3.7	4.9
	Number of workers involved						
All issues	117,248	27,558	63,677	12,726	8,791	4,182	314
Wages and hours	36,559	10,558	21,194	4,807	----	----	----
Union organization	49,848	14,409	31,684	3,206	----	549	----
Miscellaneous	30,841	2,591	10,799	4,713	8,791	3,633	314
	Percentage distribution						
All issues	100.0	23.5	54.2	10.9	7.5	3.6	0.3
Wages and hours	100.0	28.9	58.0	13.1	----	----	----
Union organization	100.0	28.9	63.6	6.4	----	1.1	----
Miscellaneous	100.0	8.4	35.0	15.3	28.5	11.8	1.0

ACTIVITIES OF NATIONAL MEDIATION BOARD IN MAY 1941

OF THE 5 cases remaining unsettled at the end of April and the 13 new cases certified to the National Mediation Board during May 1941 settlements were reached in 11 cases; 1 was returned to the Secretary of Labor as outside the Board's jurisdiction; and the remaining 6 were still pending. Cases before the Board and their status are shown in the following table as of May 31, 1941. For the disposition of cases in the preceding month see the Monthly Labor Review for May 1941.

Status of National Defense Mediation Board Cases as of May 31, 1941

Case	Date of strike	Number of men involved	Date certified to Board	Date of back-to-work agreement
Phelps-Dodge Co.	Apr. 8	1,800	Apr. 8	May 1
J. Sklar Manufacturing Co.	Apr. 4	495	Apr. 9	May 7
Arcadia Knitting Mills	Apr. 3	210	Apr. 17	May 6
American Potash	Mar. 15	1,300	Apr. 23	
Utica-Mohawk Co.	Mar. 24	2,000	Apr. 30	May 19
Curtis Manufacturing Co.	Apr. 7	300	May 3	
Busch-Sulzer Bros. Diesel Engine Co.	(1)	500	---do----	(2)
Allis-Chalmers Manufacturing Co.	(2)	1,252	---do----	May 9
Continental Rubber Co.	Apr. 2	840	May 5	May 14
Bendix Aviation Corporation	(3)	8,100	May 7	May 8
Ex-Cell-O Corporation	May 5	3,500	May 8	May 16
United Engineering & Foundry Co.	May 6	900	May 9	May 19
Twin District Council	May 9	12,000	---do----	
Allis-Chalmers Manufacturing Co.	May 7	1,150	---do----	May 16
Smoot Sand & Gravel Co.	May 12	300	May 10	May 19
Columbia Basin Area Loggers	(3)	4,000	May 12	
E. W. Bliss Co.	(3)	1,500	May 22	
North American Aviation, Inc.	(3)	11,000	---do----	

[1] Not on strike; jurisdictional dispute.
[2] Returned to Secretary of Labor as outside Board's jurisdiction.
[3] Postponed at request of Board.

ACTIVITIES OF THE UNITED STATES CONCILIATION SERVICE, APRIL 1941

THE United States Conciliation Service, in April, disposed of 562 situations, involving 963,650 workers. The services of this agency were requested by the employers, employees, and other interested parties. Of these situations, 391 were strikes, threatened strikes, lock-outs, and controversies involving 894,829 workers. The remaining situations, involving 68,821 workers, included such services as filling requests for information, adjusting complaints, consulting with labor and management, etc.

The facilities of the Service were used in 28 major industrial fields, such as building trades, and the manufacture of foods, iron and steel, textiles, etc. (table 1), and were utilized by employees and employers in 43 States and the District of Columbia (table 2).

TABLE 1.—*Situations Disposed of by U. S. Conciliation Service, April 1941, by Industries*

Industry	Disputes		Other situations		Total	
	Number	Workers involved	Number	Workers involved	Number	Workers involved
All industries	391	894,829	171	68,821	562	963,650
Automobile	20	256,935			20	256,935
Building trades	30	10,821	20	5,285	50	16,106
Chemicals	12	3,652	2	313	14	3,965
Communications	3	250			3	250
Domestic and personal	11	686	6	144	17	830
Electrical equipment	11	16,509	8	41,005	19	57,514
Food	26	10,908	7	481	33	11,389
Furniture	13	2,639	3	299	16	2,938
Iron and steel	69	90,507	13	3,292	82	93,799
Leather	3	487	2	724	5	1,211
Lumber	10	1,939	2	3	12	1,942
Machinery	32	24,513	10	690	42	25,203
Maritime	2	50	1	2,000	3	2,050
Mining	3	402,614	3	402	6	403,016
Motion pictures	1	4			1	4
Nonferrous metals	14	7,479	3	66	17	7,545
Paper	5	1,046	3	67	8	1,113
Petroleum	1	131	15	1,987	16	2,118
Printing	7	1,007	10	553	17	1,560
Professional	1	75	3	250	4	325
Rubber	6	1,353			6	1,353
Stone, clay, and glass	21	19,745	4	426	25	20,171
Textile	16	15,076	16	8,753	32	23,829
Tobacco	2	1,200	1	1	3	1,201
Trade	21	2,081	8	727	29	2,808
Transportation	15	2,450	11	141	26	2,591
Transportation equipment	19	17,457	2	2	21	17,459
Utilities	4	284			4	284
Unclassified	13	2,931	18	1,210	31	4,141

TABLE 2.—*Situations Disposed of by U. S. Conciliation Service, April 1941, by States*

State	Disputes		Other situations		Total	
	Number	Workers involved	Number	Workers involved	Number	Workers involved
All States	391	894,829	171	68,821	562	963,650
Alabama	9	4,040	5	655	14	4,695
Arkansas	3	651	2	136	5	787
Arizona	1	30			1	30
California	28	11,478	4	92	32	11,570
Colorado	3	825			3	825
Connecticut	2	805	1	800	3	1,605
Delaware	1	580			1	580
District of Columbia	13	331	8	349	21	680
Florida	10	3,391	3	313	13	3,704
Georgia	2	210	5	3,816	7	4,026
Idaho			1	1	1	1
Illinois	21	5,014	15	2,049	36	7,063
Indiana	11	9,683	5	598	16	10,281
Iowa	10	2,801	7	206	17	3,007
Kansas	6	496	1	1	7	497
Kentucky	2	913	1	2	3	915
Louisiana	11	2,076	12	341	23	2,417
Maine	1	1,600			1	1,600
Maryland	7	13,121	12	2,332	19	15,453
Massachusetts	10	14,686	1	300	11	14,986
Michigan	33	260,388	4	187	37	260,575
Mississippi	1	150	3	5	4	155
Missouri	14	1,370	4	76	18	1,446
Minnesota	7	4,845			7	4,845
Montana	2	2,443			2	2,443
Nebraska	2	1,350			2	1,350
Nevada	1	100	1	1	2	101
New Hampshire			1	41	1	41
New Jersey	20	16,576	3	232	23	16,808
New Mexico	2	818	1	7	3	825
New York	28	12,830	16	4,198	44	17,028
North Carolina	5	7,220	3	2,420	8	9,640
Ohio	35	14,927	17	1,107	52	16,034
Oregon	2	174	1	1	3	175
Pennsylvania	46	78,540	12	41,069	58	119,609
Rhode Island	1	307	1	550	2	857
South Carolina	4	2,465	9	5,588	13	8,053
Tennessee	11	3,251	6	920	17	4,171
Texas	7	953	2	2	9	955
Utah			1	400	1	400
Virginia	1	400			1	400
West Virginia	7	403,475	2	16	9	403,491
Washington	8	1,498			8	1,498
Wisconsin	3	8,018	1	10	4	8,028

STRIKE-CONTROL LEGISLATION IN MEXICO, 1941 [1]

STRIKE-CONTROL legislation amending the Federal labor law of 1931, became effective in Mexico by the publication in the Diario Oficial of April 10, 1941, of a law enacted at the suggestion of President Avilo Camacho. Strikes can be called only by a majority of the workers, and procedure for declaring them is carefully outlined.

The employer must be given a written announcement of the workers' demands and their intention to strike, at least 6 days prior to suspension of work (10 days in public services). This period begins when

[1] Data are from report of Josephus Daniels, United States Ambassador to Mexico, and C. A. Bay, of the office of the commercial attaché; and Mexican Labor News (Mexico, D. F.), April 10, 1941.

the employer receives the notice, which is to be transmitted through the Federal Board of Conciliation and Arbitration. The employer is required to reply in writing within 48 hours.

The Federal Board of Conciliation and Arbitration shall attempt conciliation immediately, summoning representatives of employer and workers. The workers' refusal to appear will suspend the period of time set in the notice for beginning a strike; the effects of the notice time shall not be suspended by the conciliatory hearings, even if the employer refuses to attend. His failure to reply makes him liable to judicial action.

A strike must be limited to the act of suspension of work. Acts of coercion or personal violence or material damage are forbidden, under penalty of imprisonment and fine, and strikebreakers cannot be brought in to break a legal strike.

In case a strike is called without the fulfillment of all legal requirements, the Conciliation Board is required to declare, within 48 hours from the time work is suspended, that a state of strike does not exist, and it shall set a period of 24 hours within which the workers must return to work. The Board is given other powers in such circumstances—over labor contracts, liability of the employer, continuance of work by those who have not abandoned work, etc.

Labor Turn-Over

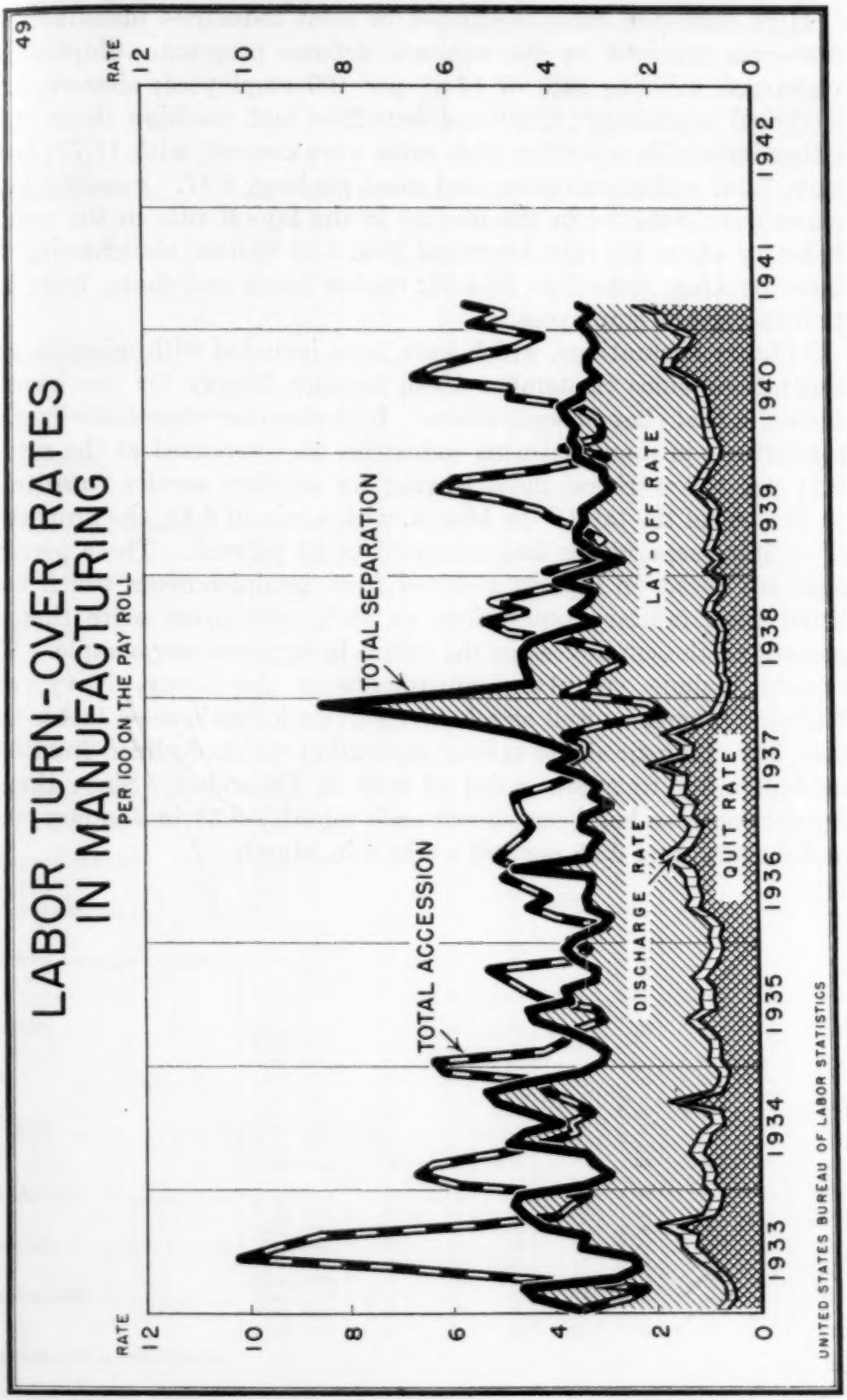
LABOR TURN-OVER IN MANUFACTURING, MARCH 1941

ACCESSIONS of workers in manufacturing plants in March reached the highest rate for any March since 1934. The Bureau of Labor Statistics' monthly survey of labor turn-over, covering 7,300 plants employing nearly 3,100,000 wage earners, showed an average accession rate of 5.62 per 100 workers on the pay roll. This rate represented a sharp increase over the February figure (4.92) and also over the March 1940 rate of 2.94. Voluntary separations or quits reported at the rate of 1.70 per 100 employees in March represented a greater percentage of all separations than in any month on record, reflecting the widespread opportunities for reemployment in the current labor market. This comparatively high quit rate was accompanied by the lowest lay-off rate (1.06) recorded during the past 11 years, indicating the need for workers brought about by the rapidly expanding production schedules of defense industries.

TABLE 1.—*Monthly Labor Turn-Over Rates in Representative Factories in 135 Industries* [1]

Class of turn-over and year	January	February	March	April	May	June	July	August	September	October	November	December	Average
Separations:													
Quits:													
1941	1.31	1.33	1.70										
1940	.63	.62	.67	0.74	0.77	0.78	0.85	1.10	1.37	1.31	1.10	0.99	0.91
Discharges:													
1941	.18	.19	.21										
1940	.14	.16	.15	.13	.13	.14	.14	.16	.16	.19	.18	.16	.15
Lay-offs: [2]													
1941	1.61	1.20	1.06										
1940	2.55	2.67	2.53	2.69	2.78	2.32	2.25	1.63	1.48	1.53	1.60	1.86	2.16
Miscellaneous separations [3]													
1941	.31	.43	.43										
1940	.11	.11	.11	.10	.10	.12	.11	.11	.21	.20	.18	.15	.13
Total:													
1941	3.41	3.15	3.40										
1940	3.43	3.56	3.46	3.66	3.78	3.36	3.35	3.00	3.22	3.23	3.06	3.16	3.35
Accessions:													
Rehirings:													
1941	1.45	1.08	1.24										
1940	1.96	1.26	1.38	1.42	1.49	2.06	1.94	3.04	2.20	1.22	1.18	1.13	1.69
New hirings:													
1941	4.09	3.84	4.38										
1940	1.78	1.72	1.56	1.63	1.87	2.70	2.83	3.59	4.01	4.30	3.47	2.98	2.70
Total	5.54	4.92	5.62										
1940	3.74	2.98	2.94	3.05	3.36	4.76	4.77	6.63	6.21	5.52	4.65	4.11	4.39

[1] The various turn-over rates represent the number of quits, discharges, lay-offs, total separations, and accessions per 100 employees.
[2] Including temporary, indeterminate, and permanent lay-offs.
[3] Beginning with September 1940, workers leaving to enter the Army or Navy are included in "miscellaneous separations."


49
LABOR TURN-OVER RATES
IN MANUFACTURING
PER 100 ON THE PAY ROLL
RATE
12
10
8
6
4
2
0
TOTAL ACCESSION
TOTAL SEPARATION
DISCHARGE RATE
QUIT RATE
LAY-OFF RATE
1933
1934
1935
1936
1937
1938
1939
1940
1941
1942
UNITED STATES BUREAU OF LABOR STATISTICS

Labor Turn-Over, by Industries

High accession rates continued in most industries manufacturing materials required by the national defense program. Shipbuilding registered a hiring rate of 13.88 per 100 employees; aircraft, 8.65; electrical machinery, 6.59; and foundries and machine shops, 6.84. Other industries reporting high rates were cement, with 11.73; furniture, 7.34; and slaughtering and meat packing, 8.47. Seasonal influences were reflected in the decline in the lay-off rate in the cement industry where the rate decreased from 4.75 to 0.64; slaughtering and meat packing, from 8.30 to 4.53; rubber boots and shoes, from 3.06 to 0.98 per 100 employees.

Military separations, which have been included with miscellaneous separations since September 1940, account largely for the increase shown in that class of separations. In September when miscellaneous separations in manufacturing industries were reported at the rate of 0.21 per 100 workers, those leaving for military service constituted 51 percent of the total. In March, with a rate of 0.43, the proportion of military separations had increased to 63 percent. These percentages are based on reports received from establishments which have listed their military separations as such, and cover more than 75 percent of the employees in the entire labor turn-over sample. The reports include voluntary enlistments in the Army, Navy, and National Guard, as well as selective-service inductions—a factor that may have influenced the rate of separation which declined from 0.22 in September to a low point of 0.08 in December. Since then a regular increase has been shown each month—0.33 in January, 0.39 in February, and 0.45 per 100 workers in March.

TABLE 2.—*Monthly Turn-Over Rates (per 100 Employees) in 39 Manufacturing Industries*[1]

Industry	Date	Separation rates				Accession rates			
		Quit[2]	Discharge	Layoff	Miscellaneous separation[3]	Total separation	Rehiring	New hiring	Total accession
Agricultural implements	Mar. 1941	1.42	0.18	0.41	0.58	2.59	0.68	3.54	4.22
	Feb. 1941	1.01	.16	.52	.39	2.08	1.26	2.91	4.17
	Mar. 1940	.43	.13	2.84	.07	3.47	.64	1.67	2.31
Aircraft	Mar. 1941	2.28	.42	.79	.50	3.99	.22	8.43	8.65
	Feb. 1941	2.21	.50	.24	.46	3.41	.42	7.30	7.72
	Mar. 1940	1.55	.42	2.20	.02	4.19	.51	8.38	8.89
Aluminum	Mar. 1941	1.54	.22	2.32	1.24	5.32	.60	2.80	3.40
	Feb. 1941	1.28	.23	1.13	1.76	4.40	1.40	4.06	5.46
	Mar. 1940	.53	.16	1.25	.35	2.29	1.76	2.20	3.96
Automobiles and bodies	Mar. 1941	1.33	.11	3.04	.55	5.03	1.63	3.33	4.96
	Feb. 1941	1.02	.06	.97	.48	2.53	1.14	2.65	3.79
	Mar. 1940	.74	.06	2.19	.16	3.15	1.45	.85	2.30
Automobile parts and equipment	Mar. 1941	1.72	.36	1.05	.40	3.53	1.24	6.25	7.49
	Feb. 1941	1.41	.33	1.69	.37	3.80	1.28	4.92	6.20
	Mar. 1940	.62	.12	4.87	.10	5.71	2.34	1.30	3.64
Boots and shoes	Mar. 1941	1.38	.18	.74	.31	2.61	.88	2.61	3.49
	Feb. 1941	1.07	.19	.67	.30	2.23	1.34	3.03	4.37
	Mar. 1940	.68	.11	1.79	.12	2.70	1.02	1.05	2.07
Brass, bronze, and copper products	Mar. 1941	2.06	.19	1.16	.62	4.03	.21	5.76	5.97
	Feb. 1941	1.42	.25	.81	.49	2.97	.77	5.13	5.90
	Mar. 1940	.43	.24	4.67	.02	5.36	1.27	.48	1.75
Brick, tile, and terra cotta	Mar. 1941	1.61	.14	1.38	.37	3.50	1.93	4.55	6.48
	Feb. 1941	1.19	.10	3.62	.34	5.25	1.04	3.74	4.78
	Mar. 1940	.51	.04	3.79	.11	4.45	4.34	2.27	6.61
Cast-iron pipe	Mar. 1941	1.13	.39	.83	.51	2.86	.96	2.65	3.61
	Feb. 1941	1.09	.17	1.31	.36	2.93	.44	1.96	2.40
	Mar. 1940	.74	.13	1.59	.04	2.50	.43	.59	1.02
Cement	Mar. 1941	.64	.04	.64	.51	1.83	9.21	2.52	11.73
	Feb. 1941	.46	.06	4.75	.42	5.69	3.68	2.12	5.80
	Mar. 1940	.19	.05	3.84	.10	4.18	14.68	2.08	16.76
Cigars and cigarettes	Mar. 1941	1.76	.11	1.64	.25	3.76	1.52	1.55	3.07
	Feb. 1941	1.77	.08	.63	.20	2.68	2.79	1.47	4.26
	Mar. 1940	1.17	.14	1.52	.12	2.95	1.50	1.27	2.77
Cotton manufacturing	Mar. 1941	2.73	.23	.67	.34	3.97	1.21	4.45	5.66
	Feb. 1941	2.53	.29	.95	.40	4.17	1.10	4.18	5.28
	Mar. 1940	1.20	.21	3.27	.18	4.86	.90	1.63	2.53
Dyeing and finishing	Mar. 1941	2.29	.26	.90	.47	3.92	.49	4.33	4.82
	Feb. 1941	2.25	.24	.95	.65	4.09	1.05	4.50	5.55
	Mar. 1940	.64	.21	2.00	.04	2.89	1.17	.87	2.04
Electrical machinery	Mar. 1941	1.19	.17	.23	.75	2.34	1.02	5.57	6.59
	Feb. 1941	1.05	.15	.37	.63	2.20	.43	5.88	6.31
	Mar. 1940	.40	.11	1.36	.33	2.20	.82	1.63	2.45
Foundries and machine shops	Mar. 1941	1.82	.38	.67	.55	3.42	.32	6.52	6.84
	Feb. 1941	1.50	.37	1.04	.46	3.37	.55	6.07	6.62
	Mar. 1940	.57	.17	2.43	.11	3.28	.58	1.93	2.51
Furniture	Mar. 1941	2.19	.37	1.02	.51	4.09	3.10	4.24	7.34
	Feb. 1941	1.60	.19	2.21	.33	4.33	1.30	3.27	4.57
	Mar. 1940	.68	.22	2.33	.10	3.33	1.56	1.74	3.30
Glass	Mar. 1941	.87	.09	1.42	.68	3.06	1.57	3.64	5.21
	Feb. 1941	.94	.09	2.06	.50	3.59	.83	2.52	3.35
	Mar. 1940	.56	.08	2.87	.08	3.59	1.52	1.18	2.70
Hardware	Mar. 1941	3.14	.43	.54	.60	4.71	.76	5.47	6.23
	Feb. 1941	2.28	.33	1.01	.66	4.28	.81	4.73	5.54
	Mar. 1940	.47	.16	2.12	.10	2.85	.44	.78	1.22
Iron and steel	Mar. 1941	.93	.13	.24	.55	1.85	.33	2.80	3.13
	Feb. 1941	.76	.09	.27	.43	1.55	.38	2.37	2.75
	Mar. 1940	.35	.08	3.81	.12	4.36	.51	.37	.88
Knit goods	Mar. 1941	1.38	.13	.80	.13	2.44	1.20	2.92	4.12
	Feb. 1941	1.43	.09	1.21	.13	2.86	.99	1.88	2.87
	Mar. 1940	.74	.12	1.77	.03	2.66	1.42	1.21	2.63
Machine tools	Mar. 1941	1.85	.42	.07	.54	2.88	.20	5.75	5.95
	Feb. 1941	1.58	.37	.13	.34	2.42	.43	4.37	4.80
	Mar. 1940	1.21	.41	.28	.09	1.99	.10	3.87	3.97

See footnotes at end of table.

TABLE 2.—*Monthly Turn-Over Rates (per 100 Employees) in 39 Manufacturing Industries* [1]—Continued

Industry	Date	Separation rates					Accession rates		
		Quit [2]	Discharge	Layoff	Miscellaneous separation [2]	Total separation	Rehiring	New hiring	Total accession
Men's clothing	Mar. 1941	1.35	0.17	1.11	0.13	2.76	0.69	2.85	3.54
	Feb. 1941	1.24	.25	1.04	.13	2.66	1.18	3.17	4.35
	Mar. 1940	.80	.10	2.71	.10	3.71	1.33	1.09	2.42
Paints and varnishes	Mar. 1941	1.22	.37	.32	.59	2.50	1.04	4.77	5.81
	Feb. 1941	.89	.25	.80	.45	2.39	.50	3.80	4.30
	Mar. 1940	.45	.17	.94	.05	1.61	.55	1.39	1.94
Paper and pulp	Mar. 1941	.97	.15	.74	.45	2.31	.35	3.12	3.47
	Feb. 1941	.75	.12	.59	.49	1.95	.44	2.25	2.69
	Mar. 1940	.35	.11	1.16	.16	1.78	.58	.79	1.37
Petroleum refining	Mar. 1941	.45	.03	.61	.32	1.41	.62	.90	1.52
	Feb. 1941	.52	.06	.80	.30	1.68	.74	1.61	2.35
	Mar. 1940	.21	.04	1.84	.12	2.21	.96	1.45	2.41
Planing mills	Mar. 1941	2.01	.26	.84	.54	3.65	.86	2.96	3.82
	Feb. 1941	1.73	.35	1.03	.51	3.62	1.37	2.47	3.84
	Mar. 1940	.75	.18	1.79	.03	2.75	1.41	1.15	2.56
Printing: Book and job	Mar. 1941	.98	.10	2.85	.36	4.29	1.66	3.11	4.77
	Feb. 1941	.84	.14	2.81	.34	4.13	2.18	2.73	4.91
	Mar. 1940	.46	.26	3.50	.19	4.41	2.35	1.71	4.06
Printing: Newspapers & periodicals	Mar. 1941	.71	.68	.77	.18	2.34	1.25	1.35	2.60
	Feb. 1941	.28	.03	1.07	.26	1.64	1.09	1.23	2.32
	Mar. 1940	.36	.09	1.30	.03	1.78	1.42	1.00	2.42
Radios and phonographs	Mar. 1941	1.94	.19	1.79	.16	4.08	1.48	3.14	4.62
	Feb. 1941	1.77	.07	5.36	.32	7.52	1.43	3.11	4.54
	Mar. 1940	1.17	.10	3.43	.01	4.71	2.51	.94	3.45
Rayon and allied products	Mar. 1941	1.32	.08	.30	.30	2.00	.69	2.30	2.99
	Feb. 1941	1.06	.15	.30	.74	2.25	1.22	2.47	3.69
	Mar. 1940	1.67	.09	1.42	.02	3.20	.91	2.59	3.50
Rubber boots and shoes	Mar. 1941	1.49	.19	.98	.29	2.95	1.90	4.43	6.33
	Feb. 1941	1.44	.35	3.06	.61	5.45	.98	2.12	3.10
	Mar. 1940	.43	.17	2.48	.33	3.41	1.57	.43	2.00
Rubber tires	Mar. 1941	.82	.19	.23	.54	1.78	.46	4.03	4.49
	Feb. 1941	.71	.05	.28	.36	1.40	1.78	2.07	3.85
	Mar. 1940	.33	.05	2.50	.15	3.03	.66	.21	.87
Sawmills	Mar. 1941	2.00	.21	1.98	.39	4.58	2.63	3.54	6.17
	Feb. 1941	1.52	.17	2.79	.35	4.83	1.62	2.44	4.06
	Mar. 1940	.96	.23	2.92	.10	4.21	3.00	2.09	5.09
Shipbuilding	Mar. 1941	2.00	.37	3.51	.60	6.48	2.95	10.93	13.88
	Feb. 1941 [3]	1.85	.36	3.21	.70	6.12	2.70	8.34	11.04
	Mar. 1940	.95	.33	3.65	.08	5.01	1.12	5.92	7.04
Silk and rayon goods	Mar. 1941	2.38	.33	.98	.21	3.90	1.38	4.23	5.61
	Feb. 1941	1.50	.21	2.22	.34	4.27	1.60	2.93	4.53
	Mar. 1940	.68	.12	2.95	.05	3.80	2.61	.86	3.47
Slaughtering and meat packing	Mar. 1941	.96	.13	4.53	.79	6.41	5.70	2.77	8.47
	Feb. 1941	.82	.15	8.30	.68	9.95	5.25	1.25	6.50
	Mar. 1940	.46	.14	6.47	.12	7.19	3.46	1.72	5.18
Steam- and hot-water heating	Mar. 1941	2.49	.33	.25	.63	3.70	.25	4.99	5.24
	Feb. 1941	2.05	.21	.62	.55	3.43	.67	3.50	4.17
	Mar. 1940	.51	.08	1.59	.07	2.25	.39	1.24	1.63
Structural and ornamental metal work	Mar. 1941	1.70	.11	1.64	.31	3.76	.80	3.94	4.74
	Feb. 1941	1.27	.18	1.19	.58	3.22	.73	6.88	7.61
	Mar. 1940	.34	.07	6.21	.07	6.69	2.80	2.58	5.38
Woolen and worsted goods	Mar. 1941	2.09	.18	.96	.45	3.68	1.03	3.65	4.68
	Feb. 1941	2.17	.14	1.27	.49	4.07	1.97	4.55	6.52
	Mar. 1940	.60	.21	10.13	.45	11.39	1.47	.52	1.99

[1] No individual industry data shown unless reports cover at least 25 percent of industrial employment.
[2] Beginning with September 1940, workers leaving to enter the Army or Navy are included in "miscellaneous separations."
[3] Revised.

Minimum Wages and Maximum Hours

WAGE ORDER FOR PORTABLE LAMP AND SHADE INDUSTRY [1]

EMPLOYEES engaged in interstate commerce or on the production of goods for interstate commerce in the portable lamp and shade industry are entitled to a minimum hourly wage of 40 cents beginning July 1, 1941, under the terms of a wage order issued by the Administrator of the Fair Labor Standards Act. It was estimated that more than one-half of the 10,000 men and women in the industry would receive wage increases as a result of this action.

As defined in the order the industry consists of—

Portable lamp division.—The manufacturing, assembling, and decorating of lamps for illuminating purposes which can be moved from place to place and which can be plugged into electrical outlets by means of an extension cord and plug, excluding the manufacturing of parts for such lamps by any person other than the manufacturer, assembler or decorator of such lamps.

Lamp shade division.—The manufacturing, assembling, and decorating of lamp shades of any material except metal, glass, or plastic.

Coverage extends to all occupations that are necessary to the production of portable lamps and shades, including clerical, maintenance, shipping, and selling operations. Excluded are employees of an independent wholesaler or employees of a manufacturer who are engaged exclusively in marketing and distributing products of the industry which have been purchased for resale.

WAGE ORDER FOR STRAW-HAT, COCONUT, AND VEGETABLE-PACKING INDUSTRIES IN PUERTO RICO

UNDER the provisions of the Fair Labor Standards Act, the recommendations of a special industry committee for minimum hourly rates in the straw-hat, manufactured-coconut, and vegetable-packing industries in Puerto Rico, were approved by the Administrator on May 7, 1941.[2]

[1] U. S. Department of Labor, Wage and Hour Division, Press releases Nos. 1378 and 1380.

[2] Federal Register, Washington, May 10, 1941.

In the straw-hat industry, which covers the manufacture of hats from straw as used in the trade sense, and is not confined to hats made from natural fibers, a minimum rate of 25 cents an hour was established. The same rate was fixed for the manufactured-coconut industry, comprising the manufacture of desiccated or prepared coconut. The minimum rate in the vegetable-packing industry, including the handling, grading, packing, and preparing of fresh vegetables, in the raw or natural state, was fixed at 15 cents an hour.

The wage order became effective May 12, 1941.

ESTABLISHMENT OF MINIMUM SCALE FOR KNIT-GOODS INDUSTRY IN CUBA, 1941 [1]

ON APRIL 1 a minimum-wage scale became effective in Cuban factories making knitted garments. This was prescribed in an order (Resolution No. 59) of the National Minimum Wage Commission on March 15, 1941. This scale represents the first comprehensive minimum-wage regulation applicable to the Cuban knitting industry, although minimum wages had been established for hosiery manufacture in 1935 and 1936. The only other attempt to establish minimum wages in any branch of the garment industry was a wage scale, set August 7, 1935, for piece work in private homes. Consideration is being given to the establishment of minimum wages throughout the entire garment industry of Cuba, but it was deemed desirable by the National Minimum Wage Commission that its findings with respect to the knit-goods industry be put into effect at once, as the question of wages appears to have been "one of the factors leading to conflicts that have recently arisen between employers and workers in that branch of the (garment) industry."

In this connection the Commission stated:

> In many cases employers recently established have sought to pay wages lower than those paid by industries already established and in other cases have obtained contracts on those inferior conditions, giving rise to unfair competition with those already engaged in those activities; and also by removal of their shops to places outside of Habana they have been able to pay lower wages, because of the fact that in those places there were no industrial centers and the unemployed accepted those conditions in order to have any work at all, those transfers and the claims in connection therewith giving rise to frequent conflicts between employers and workers.

Qualifying the minimum wages established in its recent order, the Commission also stipulated that where wages higher than those prescribed were in effect, as a result of collective or individual agreements, there should be no reduction. It also specified that the nomenclature of jobs contained in the new wage scale shall be applicable to

[1] From report of Coert du Bois, United States consul general at Habana.

all shops making up knit goods in which said jobs exist or are created, but the creation of such jobs is not thereby made obligatory; also, that "when said jobs are being performed under a classification other than that specified in the wage scale, they shall be considered to be such, provided the nature of the work being done is the same as that fundamentally indicated; and in the case of work not covered by the wage scale but proper to the making up of knit goods, the wage corresponding to the work similar thereto shall be paid." [2] The Commission's order provides that knitters and helpers shall not be assigned to a larger number of machines than they were tending when the new wage scale was promulgated.

[2] The wage scale, applying as it does, to a great variety of processes, cannot be given here for lack of space. It can be consulted by persons interested, at the Bureau of Labor Statistics, Washington, D. C.

Wages and Hours of Labor

EARNINGS IN THE MANUFACTURE OF RUBBER PRODUCTS, MAY 1940 [1]

Summary

DURING May 1940 the earnings of workers in the rubber tire and tube industry averaged 92.9 cents an hour. The average hourly earnings of 43,597 direct production workers surveyed were 95.3 cents, and the earnings of 13,157 nonproduction workers averaged 85.8 cents. Male workers, who constituted more than 85 percent of the labor force, averaged 97.2 cents an hour, while females earned on the average 65.8 cents an hour.

In the rubber boot and shoe industry, average hourly earnings of the 15,988 workers amounted to 58.6 cents, production workers receiving 58.3 cents and nonproduction workers 59.6 cents. Male workers averaged 20 cents an hour more than females—68.6 cents as compared to 48.6 cents an hour.

Workers producing rubber goods other than tires and tubes and boots and shoes averaged 60.5 cents an hour, production workers earning 59.1 cents and nonproduction workers 65.6 cents an hour. The 31,412 male workers producing "other rubber goods" earned on the average 66.2 cents an hour, and the 12,780 females 45.7 cents. The earnings of workers in the "other rubber goods" industry are analyzed in detail in the latter part of the present article.

Scope and Characteristics of the Rubber Industry

The basic data for the present report were obtained by the Bureau of Labor Statistics at the joint request of the Wage and Hour Division and the Public Contracts Division of the United States Department of Labor. These divisions agreed upon a definition of the industry which was followed in conducting the survey and preparing the report. According to this definition, the rubber manufacturing industry includes:

[1] Prepared by Sidney C. Sufrin, assisted by Donald L. Helm, both of the Division of Wage and Hour Statistics of the Bureau of Labor Statistics. The present article is a condensation of a more detailed mimeographed report of the same title, released March 17, 1941, and of printed report (Serial No. R. 1283). Copies of the longer reports may be had on request.

(*a*) The manufacture of pneumatic tires and inner tubes for motor vehicles, motorcycles, bicycles, and other vehicles; solid and cushion rubber tires for trucks and other vehicles; and

(*b*) The manufacture from rubber, natural or synthetic, of other goods including, but without limitation: (1) Rubber footwear; (2) rubber heels and soles; (3) heavy and other mechanical rubber goods; (4) druggists', surgical, household, and stationers' rubber sundries; (5) reclaimed rubber for sale or for use in the same plant for further manufacture; (6) rubber flooring; (7) hard-rubber goods; (8) molded, extruded, and lathe-cut rubber goods; (9) industrial sponge rubber; (10) proofed goods; including automobile and other fabrics, but excluding the manufacture of finished rubber or rubberized clothing and apparel. Expressly excluded also is the manufacture of insulated wire and cable.

The basic data for the present study were obtained from the various rubber companies through mail questionnaires, which were prepared, tabulated, and analyzed by the Division of Wage and Hour Statistics of the Bureau of Labor Statistics. The information covers the pay-roll period ending nearest May 15, 1940. The names and addresses of the firms to which questionnaires were sent were obtained through examination of industrial directories and trade lists, and from other sources.

The importance of rubber products in the American economy can scarcely be overestimated. The use of rubber in both industrial and consumption spheres in this country has become so widespread that more than half of the rubber annually consumed in the world is now used in the United States.[2] The importance of the rubber industry and its products in the present defense program is too well known to require comment. It is estimated that the total investment in the rubber industry is in the neighborhood of a billion dollars, and that during peak periods the combined industry provides jobs for nearly 150,000 workers.

Within the last 10 years the industry has been the scene of marked trade-union activity and organization. According to recent information, there are nearly 90,000 unionists employed in the industry, about 80 percent of whom are members of the United Rubber Workers, affiliated with the Congress of Industrial Organizations; the rest are members of federal labor unions of the American Federation of Labor. Data regarding the degree of unionization of the separate branches of the rubber industry are not available.

THE QUESTIONNAIRE DATA

The mail questionnaire used in this study did not call for data which would permit a comparison of the wages and hours of union and nonunion workers, nor was information secured regarding occupations, degrees of skill, methods of payment, overtime policies, etc. Consequently, the present analysis is less detailed in some respects than

[2] U. S. Department of Commerce. Trade Promotion Series 209: Rubber History, Production and Manufacture, by P. W. Barker. Washington, 1940.

are other studies by the Bureau of Labor Statistics for which the basic information is obtained by trained field representatives. Detailed information was secured regarding hourly earnings, weekly hours paid for, and weekly earnings, by sex of worker and class of work, and is incorporated in the present study. Two classes of work were reported—"production" and "nonproduction." Production work includes all direct manufacturing activities; nonproduction includes clerical, plant and machine maintenance, and repair work.

Information on hours presented in this report refers not to hours actually worked, but to "hours paid for," i. e., the number of hours an employee would have to work to earn the pay he received during the pay-roll period scheduled, were all his hours of work remunerated at normal hourly rates of pay. Thus, an hour of overtime work at penalty rates is treated as more than an hour of time paid for. If the overtime rate is time and a half, each hour of overtime work is treated as one and a half hours.[3] The purpose of this means of reporting is to permit the computation of normal average hourly earnings without their distortion by overtime penalty rates.

To facilitate the analysis of the material, the data were divided into three major divisions, relating to (1) tires and tubes, (2) rubber boots and shoes, and (3) "other rubber goods." In turn, the "other rubber goods" industry was subdivided into (a) mechanical rubber goods, (b) reclaimed rubber, (c) rubber heels and soles, (d) rubber balls, toys, and balloons, (e) rubber sundries, and (f) miscellaneous rubber goods. The products included in each of these subdivisions are described in later sections of this article. Wherever possible the data have been grouped by regions to show geographical differences in earnings.

Tire and Tube Industry

The tire and tube industry is the most important segment of the combined rubber products industry. The manufacture of tires and tubes accounts for over half of the dollar volume of all rubber products, and more than two-fifths of the employment in all rubber factories in the United States.

The tire and tube industry is typically one of large-scale production. In 1939, according to the Census of Manufactures, there were 53 establishments in the industry, and they manufactured a product valued at more than half a billion dollars.

Census of Manufactures information indicates that in 1937 the tire and tube industry was located in 16 States. In the Middle West—the largest tire and tube producing area—plants were reported in Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin. In the

[3] For example, an employee who actually worked 42 hours at regular rates and 2 hours at extra rates of time and a half would be credited not with 44 hours, but the 45 "hours paid for" (42 hours+2 hours×1½=45 hours, the equivalent number of hours paid for at regular rates).

East, plants were located in Connecticut, Maryland, Massachusetts, New Jersey, New York, and Pennsylvania. In the South there were tire and tube plants in the States of Alabama and Tennessee. The West was represented by California and Colorado.

SUMMARY OF AVERAGE HOURLY AND WEEKLY EARNINGS

The 43 plants manufacturing principally rubber tires and tubes,[4] which returned usable questionnaires, employed 56,754 workers in May 1940, of whom 43,597 were engaged in direct production activities and 13,157 in nonproduction activities, such as the provision of heating, lighting and power, custodial, clerical, and maintenance work. Average hourly earnings for these workers combined were 92.9 cents, production workers earning on the average 95.3 cents and nonproduction workers 85.8 cents. It is interesting to note that the rubber tire and tube industry is the only one of the rubber industries covered in this survey in which the average hourly earnings of production workers exceeded those of nonproduction workers.

Table 1 presents for the United States and for each major region of the industry [5] information regarding the number of workers covered in the survey of the rubber tire and tube industry, their average hourly earnings, average weekly "hours paid for," and average weekly earnings. Both production and nonproduction workers in the industry had average earnings of slightly more than $33 per week. The average hours per week were just under 36 for the entire industry; for production workers the hours were less than 35 per week and for nonproduction workers, 39 per week.

The average hourly earnings in the Akron and Detroit areas were appreciably higher than those in any other region surveyed. The average hourly wage of $1.06 in these cities compared favorably with the average earnings in any mass-production industry in the United States. California, usually a high-wage area, paid an average hourly wage 13 cents below the average paid in Akron and Detroit. Although the hourly wages in Akron and Detroit were the highest in the industry, the weekly earnings of tire and tube workers in Akron and Detroit in May 1940 were slightly lower than the weekly earnings of the workers in California—$35.05 as compared to $35.73. In both the Akron and Detroit areas and in California, the typical workweek was less than 40 hours.

[4] Some of these plants also produced mechanical rubber goods, boots and shoes, druggists' sundries, and other rubber products. Wages of all workers employed in the plants were studied; no attempt was made to segregate the individual workers by type of product worked on.

[5] The data secured by the questionnaire survey were segregated by the important regions in which the tire and tube industry is located. These regions are (1) Akron and Detroit; (2) the Northeastern region, including the States of Connecticut, Maryland, Massachusetts, New York, and Pennsylvania; (3) the Midwestern region, including the States of Illinois, Indiana, Iowa, Michigan (exclusive of Detroit), Minnesota, Ohio (exclusive of Akron), and Wisconsin; (4) the Southern region, including the States of Alabama, Mississippi, Missouri, and Tennessee; and (5) California.

TABLE 1.—*Average Hourly Earnings, Weekly Hours Paid For, and Weekly Earnings in the Rubber Tire and Tube Industry, by Region, Class of Work, and Sex, May 1940*

Region and class of work	All workers				Males				Females			
	Number of workers	Average hourly earnings	Average weekly hours paid for	Average weekly earnings	Number of workers	Average hourly earnings	Average weekly hours paid for	Average weekly earnings	Number of workers	Average hourly earnings	Average weekly hours paid for	Average weekly earnings
United States	56,754	$0.929	35.7	$33.15	48,373	$0.972	36.1	$35.12	8,381	$0.658	33.1	$21.79
Production	43,597	.953	34.7	33.07	36,969	.993	35.3	35.06	6,628	.700	31.4	21.97
Nonproduction	13,157	.858	39.0	33.45	11,404	.909	38.9	35.34	1,753	.532	39.6	21.09
Akron and Detroit	33,117	1.063	33.0	35.05	27,931	1.118	33.5	37.41	5,186	.738	30.3	22.34
Production	25,685	1.087	32.0	34.78	21,103	1.150	32.6	37.47	4,582	.764	29.3	22.40
Nonproduction	7,432	.990	36.4	36.00	6,828	1.027	36.3	37.24	604	.582	37.7	21.93
California	3,943	.933	38.3	35.73	3,603	.963	38.3	36.86	340	.620	38.3	23.73
Production	2,966	.966	37.8	36.51	2,823	.979	37.9	37.11	143	.686	35.8	24.58
Nonproduction	977	.840	39.7	33.36	780	.907	39.6	35.94	197	.576	40.1	23.11
Southern region	3,825	.607	44.7	27.17	3,558	.616	44.7	27.55	267	.492	44.7	22.02
Production	2,894	.602	44.2	26.64	2,726	.610	44.1	26.87	168	.490	46.8	22.91
Nonproduction	931	.621	46.4	28.81	832	.634	47.0	29.80	99	.497	41.3	20.52
Northeastern region	6,820	.777	39.0	30.34	5,885	.809	39.3	31.74	935	.573	37.6	21.54
Production	5,433	.793	38.1	30.20	4,815	.817	38.4	31.35	618	.594	35.7	21.22
Nonproduction	1,387	.722	42.8	30.91	1,070	.775	43.2	33.50	317	.537	41.3	22.17
Midwestern region	9,049	.778	38.2	29.74	7,396	.828	38.6	31.98	1,653	.541	36.5	19.74
Production	6,619	.813	37.0	30.05	5,502	.856	37.4	32.06	1,117	.582	34.7	20.17
Nonproduction	2,430	.693	41.7	28.90	1,894	.754	42.1	31.74	536	.468	40.3	18.86

In the Northeast and Midwest regions, which together employed less than half the number of workers employed in Akron and Detroit, the average hourly earnings were just under 78 cents. The average workweek in these two regions was slightly below 40 hours, so that average weekly earnings approximated $30 a week. In the South, where the average hourly earnings were only 60.7 cents, the average weekly earnings of $27.17 approached the average weekly earnings in the Northeast and Midwest regions, because the average hours of work exceeded 44 per week.

In each region of the industry, male workers earned more than female workers and in each region other than the South and California, male workers tended to work longer hours than female workers. Male workers were five times as numerous as female workers in the industry as a whole.

HOURLY EARNINGS BY SEX OF WORKERS, CLASS OF WORK, AND REGION

Table 2 shows the percentage distribution of workers by classified hourly earnings for the entire United States and for the five regions in which the industry is located. The chart (p. 1496) presents graphically the distribution for workers in the tire and tube industry, and similar distributions for the boot and shoe and "other rubber goods" industries. The general average of 92.9 cents per hour in the tire and tube industry is, of course, strongly influenced by the fact that the high-wage Akron and Detroit area includes almost 60 percent of the reported workers. Fewer than 7 percent of the reported workers were employed in California, the area in which average hourly earnings most closely approximated those of the Akron and Detroit area.

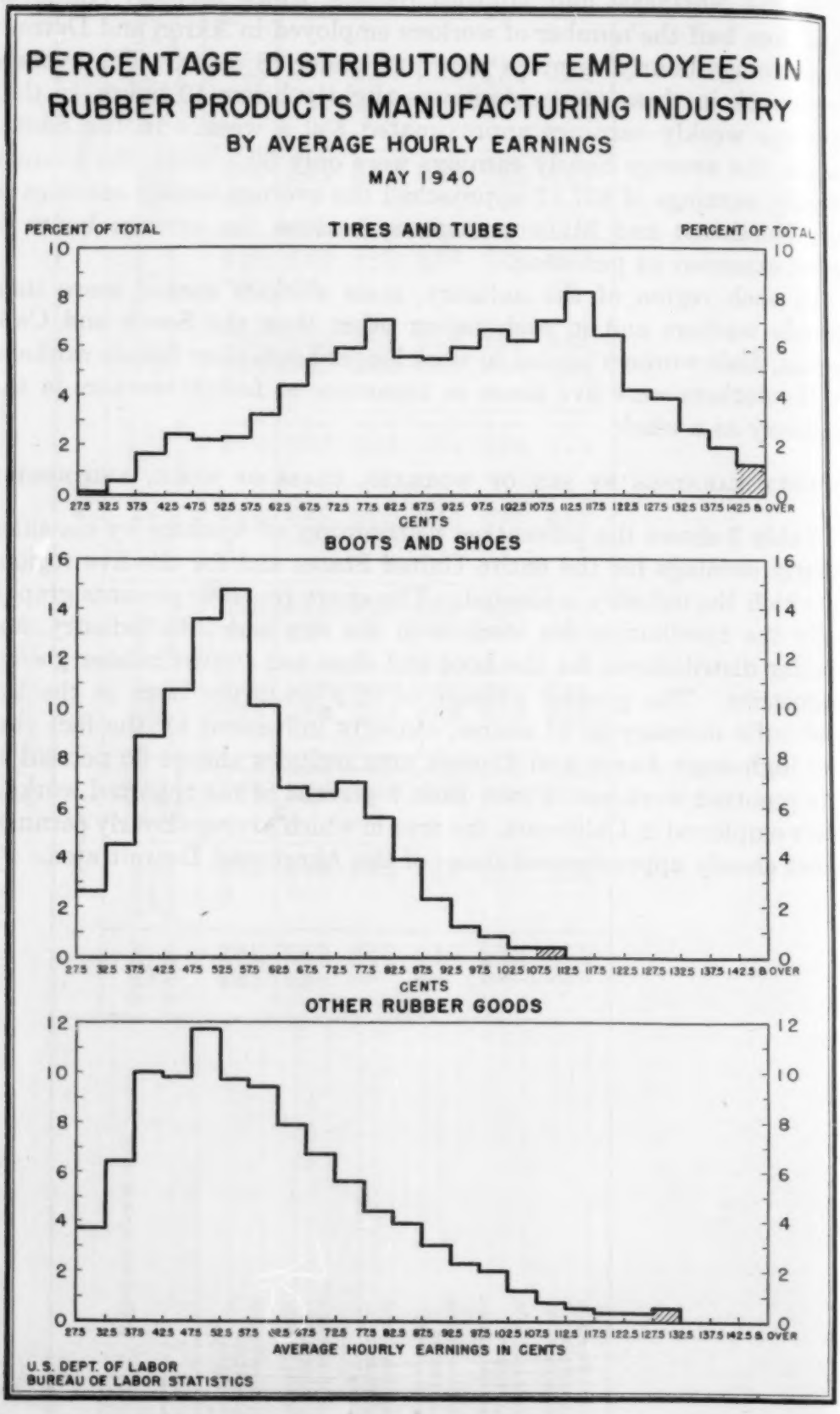

PERCENTAGE DISTRIBUTION OF EMPLOYEES IN RUBBER PRODUCTS MANUFACTURING INDUSTRY
BY AVERAGE HOURLY EARNINGS
MAY 1940
TIRES AND TUBES
PERCENT OF TOTAL
CENTS
BOOTS AND SHOES
OTHER RUBBER GOODS
AVERAGE HOURLY EARNINGS IN CENTS
U.S. DEPT. OF LABOR
BUREAU OF LABOR STATISTICS

TABLE 2.—*Percentage Distribution of Workers in the Rubber Tire and Tube Industry, by Region, Average Hourly Earnings, Sex, and Class of Work, May 1940*

Average hourly earnings	All workers			Males			Females		
	Total	Production	Nonproduction	Total	Production	Nonproduction	Total	Production	Nonproduction
United States									
27.5 and under 32.5 cents	0.1	0.1	0.3	0.1	(1)	0.2	0.3	0.2	0.6
32.5 and under 37.5 cents	.5	.3	1.1	.3	0.2	.6	1.6	.7	4.8
37.5 and under 42.5 cents	1.6	1.3	2.7	1.3	1.2	1.7	3.3	1.7	9.4
42.5 and under 47.5 cents	2.4	2.0	3.8	1.5	1.6	1.0	7.6	3.8	21.8
47.5 and under 52.5 cents	2.2	1.6	3.9	1.2	1.0	1.6	7.8	5.0	18.4
52.5 and under 57.5 cents	2.3	1.8	4.0	1.6	1.2	2.7	6.4	4.9	11.9
57.5 and under 62.5 cents	3.2	3.0	3.6	2.5	2.3	3.1	7.0	6.9	7.5
62.5 and under 67.5 cents	4.4	4.1	5.4	2.8	2.4	4.4	13.4	13.8	11.9
67.5 and under 72.5 cents	5.4	5.6	4.6	4.1	4.0	4.6	12.7	14.7	5.1
72.5 and under 77.5 cents	5.9	6.0	5.4	4.5	4.1	5.6	14.1	16.6	4.3
77.5 and under 82.5 cents	7.0	6.2	9.8	6.3	4.8	11.0	11.4	13.9	2.1
82.5 and under 87.5 cents	5.5	5.4	5.8	4.9	4.4	6.5	9.3	11.6	.7
87.5 and under 92.5 cents	5.4	5.5	4.9	5.9	6.0	5.6	2.3	2.8	.4
92.5 and under 97.5 cents	5.9	6.0	5.6	6.7	6.8	6.4	1.2	1.5	.4
97.5 and under 102.5 cents	6.6	6.5	6.8	7.6	7.6	7.8	.6	.7	.2
102.5 and under 107.5 cents	6.2	6.5	5.2	7.2	7.6	6.0	.2	.2	.2
107.5 and under 112.5 cents	7.0	6.9	7.7	8.3	8.1	8.8	.2	.2	-------
112.5 and under 117.5 cents	8.2	7.9	10.0	9.8	9.2	11.5	.1	.2	-------
117.5 and under 122.5 cents	6.4	7.1	4.2	7.5	8.4	4.9	.1	.1	-------
122.5 and under 127.5 cents	4.2	4.6	2.7	4.8	5.4	3.1	.3	.4	.1
127.5 and under 132.5 cents	3.9	4.7	1.2	4.5	5.5	1.4	.1	.1	.1
132.5 and under 137.5 cents	2.6	3.2	.5	3.0	3.8	.5	(1)	(1)	-------
137.5 and under 142.5 cents	1.9	2.3	.3	2.2	2.7	.4	(1)	-------	.1
142.5 and under 147.5 cents	.6	.7	.2	.7	.9	.2	-------	-------	-------
147.5 cents and over	.6	.7	.3	.7	.8	.4	-------	-------	-------
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers	56,754	43,597	13,157	48,373	36,969	11,404	8,381	6,628	1,753
Average hourly earnings	$0.929	$0.953	$0.858	$0.972	$0.993	$0.909	$0.658	$0.700	$0.532
Akron and Detroit									
27.5 and under 32.5 cents	-------	-------	-------	-------	-------	-------	-------	-------	-------
32.5 and under 37.5 cents	(1)	(1)	0.1	(1)	(1)	(1)	0.1	(1)	0.7
37.5 and under 42.5 cents	0.1	0.1	.3	0.1	(1)	0.2	.4	0.3	1.2
42.5 and under 47.5 cents	.5	.1	1.8	.1	-------	.3	2.7	.6	18.5
47.5 and under 52.5 cents	.5	.2	1.5	.1	(1)	.3	2.7	1.1	14.9
52.5 and under 57.5 cents	.5	.3	1.2	.1	0.1	.1	3.0	1.5	13.7
57.5 and under 62.5 cents	.7	.7	1.0	.2	.1	.5	3.6	3.2	6.3
62.5 and under 67.5 cents	2.2	2.0	2.7	.3	.1	.9	12.2	10.7	23.5
67.5 and under 72.5 cents	2.7	3.1	1.6	.5	.3	1.0	14.9	15.9	7.6
72.5 and under 77.5 cents	4.4	4.6	3.5	1.3	.7	3.1	20.9	22.8	7.8
77.5 and under 82.5 cents	6.1	4.7	10.8	3.9	1.5	11.4	17.4	19.2	4.5
82.5 and under 87.5 cents	4.6	4.6	4.7	2.8	2.1	5.0	14.4	16.2	.8
87.5 and under 92.5 cents	3.6	3.5	4.2	3.7	3.4	4.5	3.5	3.9	.2
92.5 and under 97.5 cents	5.5	5.2	6.7	6.2	5.9	7.3	1.8	2.0	-------
97.5 and under 102.5 cents	6.9	6.2	9.2	8.0	7.3	10.0	.9	1.0	.3
102.5 and under 107.5 cents	7.1	7.0	7.4	8.3	8.4	8.0	.2	.3	-------
107.5 and under 112.5 cents	9.8	9.2	11.7	11.6	11.2	12.8	.3	.3	-------
112.5 and under 117.5 cents	12.5	11.3	16.9	14.7	13.6	18.6	.2	.2	-------
117.5 and under 122.5 cents	10.0	10.8	7.0	11.8	13.1	7.7	.2	.2	-------
122.5 and under 127.5 cents	6.6	7.2	4.3	7.7	8.7	4.6	.5	.5	-------
127.5 and under 132.5 cents	6.4	7.6	1.9	7.5	9.3	2.1	.1	.1	-------
132.5 and under 137.5 cents	4.3	5.3	.7	5.1	6.5	.8	(1)	(1)	-------
137.5 and under 142.5 cents	3.1	3.9	.4	3.7	4.8	.4	-------	-------	-------
142.5 and under 147.5 cents	1.0	1.2	.2	1.2	1.5	.2	-------	-------	-------
147.5 cents and over	.9	1.2	.2	1.1	1.4	.2	-------	-------	-------
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers	33,117	25,685	7,432	27,931	21,103	6,828	5,186	4,582	604
Average hourly earnings	$1.063	$1.087	$0.990	$1.118	$1.150	$1.027	$0.738	$0.764	$0.582

[1] Less than a tenth of 1 percent.

TABLE 2.—*Percentage Distribution of Workers in the Rubber Tire and Tube Industry, by Region, Average Hourly Earnings, Sex, and Class of Work, May 1940*—Continued

Average hourly earnings	All workers			Males			Females		
	Total	Production	Nonproduction	Total	Production	Nonproduction	Total	Production	Nonproduction
California									
27.5 and under 32.5 cents	-------	-------	-------	-------	-------	-------	-------	-------	-------
32.5 and under 37.5 cents	-------	-------	-------	-------	-------	-------	-------	-------	-------
37.5 and under 42.5 cents	0.5	0.3	1.1	0.4	0.3	0.9	1.2	-------	2.0
42.5 and under 47.5 cents	1.1	.4	3.3	.6	.4	1.0	7.1	-------	12.2
47.5 and under 52.5 cents	1.2	.1	4.8	.3	(1)	1.3	11.2	0.7	18.8
52.5 and under 57.5 cents	1.0	.3	3.3	.2	.3	.1	9.1	-------	15.7
57.5 and under 62.5 cents	2.4	1.3	5.7	.9	.8	1.2	18.8	11.9	24.0
62.5 and under 67.5 cents	3.8	3.2	5.4	2.3	2.1	3.2	19.4	26.6	14.2
67.5 and under 72.5 cents	7.3	6.3	10.3	5.9	4.6	10.6	22.0	39.8	9.1
72.5 and under 77.5 cents	5.8	6.0	5.4	5.6	5.4	6.4	7.9	16.8	1.5
77.5 and under 82.5 cents	5.2	5.1	5.6	5.5	5.1	6.9	1.8	3.5	.5
82.5 and under 87.5 cents	6.0	5.4	8.1	6.6	5.6	10.1	.3	.7	-------
87.5 and under 92.5 cents	8.1	8.4	7.3	8.9	8.8	9.0	.3	-------	.5
92.5 and under 97.5 cents	10.1	11.8	4.6	10.9	12.4	5.5	.6	-------	1.0
97.5 and under 102.5 cents	13.4	14.1	10.7	14.4	15.0	13.2	.3	-------	.5
102.5 and under 107.5 cents	9.2	9.5	8.4	10.1	10.1	10.5	-------	-------	-------
107.5 and under 112.5 cents	8.5	7.7	11.3	9.3	8.0	14.1	-------	-------	-------
112.5 and under 117.5 cents	6.7	8.3	1.8	7.4	8.7	2.3	-------	-------	-------
117.5 and under 122.5 cents	5.5	6.9	1.2	6.1	7.3	1.5	-------	-------	-------
122.5 and under 127.5 cents	2.6	3.1	1.2	2.9	3.3	1.5	-------	-------	-------
127.5 and under 132.5 cents	.9	1.2	.2	1.0	1.2	.3	-------	-------	-------
132.5 and under 137.5 cents	.1	.1	-------	.1	.1	-------	-------	-------	-------
137.5 and under 142.5 cents	.2	.2	.1	.2	.2	.1	-------	-------	-------
142.5 and under 147.5 cents	.2	.2	-------	.2	.2	-------	-------	-------	-------
147.5 cents and over	.2	.1	.2	.2	.1	.3	-------	-------	-------
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers	3,943	2,966	977	3,603	2,823	780	340	143	197
Average hourly earnings	$0.933	$0.966	$0.840	$0.963	$0.979	$0.907	$0.620	$0.686	$0.576
Southern region									
27.5 and under 32.5 cents	0.7	0.3	1.9	0.7	0.3	2.0	0.7	0.6	1.0
32.5 and under 37.5 cents	3.3	2.8	4.7	3.3	2.8	4.9	3.0	3.0	3.0
37.5 and under 42.5 cents	14.1	13.2	17.1	14.8	13.9	17.9	4.9	1.8	10.1
42.5 and under 47.5 cents	13.5	16.2	5.2	12.9	16.0	2.8	21.7	19.6	25.3
47.5 and under 52.5 cents	8.5	8.7	8.1	5.4	5.5	4.8	50.5	59.5	35.4
52.5 and under 57.5 cents	5.6	4.9	8.1	5.2	4.4	7.6	12.0	11.9	12.1
57.5 and under 62.5 cents	8.7	9.6	6.0	9.1	10.1	6.1	3.4	2.4	5.1
62.5 and under 67.5 cents	7.9	7.5	9.0	8.4	8.0	9.7	1.1	-------	3.0
67.5 and under 72.5 cents	15.6	16.8	11.2	16.5	17.8	12.2	1.9	1.2	3.0
72.5 and under 77.5 cents	8.6	7.9	10.7	9.2	8.4	11.9	.4	-------	1.0
77.5 and under 82.5 cents	6.0	5.7	7.2	6.5	6.0	8.1	-------	-------	-------
82.5 and under 87.5 cents	3.2	2.6	4.9	3.4	2.8	5.5	-------	-------	-------
87.5 and under 92.5 cents	2.6	2.8	2.3	2.8	2.9	2.5	-------	-------	-------
92.5 and under 97.5 cents	.8	.7	1.2	.9	.8	1.3	-------	-------	-------
97.5 and under 102.5 cents	.2	.1	.6	.2	.1	.6	.4	-------	1.0
102.5 and under 107.5 cents	.2	.1	.4	.2	.1	.5	-------	-------	-------
107.5 and under 112.5 cents	.2	.1	.5	.2	.1	.6	-------	-------	-------
112.5 and under 117.5 cents	-------	-------	-------	-------	-------	-------	-------	-------	-------
117.5 and under 122.5 cents	.1	-------	.2	.1	-------	.2	-------	-------	-------
122.5 and under 127.5 cents	.1	(1)	.3	.1	(1)	.4	-------	-------	-------
127.5 and under 132.5 cents	(1)	-------	.1	(1)	-------	.1	-------	-------	-------
132.5 and under 137.5 cents	-------	-------	-------	-------	-------	-------	-------	-------	-------
137.5 and under 142.5 cents	(1)	-------	.1	(1)	-------	.1	-------	-------	-------
142.5 and under 147.5 cents	-------	-------	-------	-------	-------	-------	-------	-------	-------
147.5 cents and over	.1	-------	.2	.1	-------	.2	-------	-------	-------
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers	3,825	2,894	931	3,558	2,726	832	267	168	99
Average hourly earnings	$0.607	$0.602	$0.621	$0.616	$0.610	$0.634	$0.492	$0.490	$0.497

[1] Less than a tenth of 1 percent

TABLE 2.—*Percentage Distribution of Workers in the Rubber Tire and Tube Industry, by Region, Average Hourly Earnings, Sex, and Class of Work, May 1940*—Continued

Average hourly earnings	All workers			Males			Females		
	Total	Production	Nonproduction	Total	Production	Nonproduction	Total	Production	Nonproduction
Northeastern region									
27.5 and under 32.5 cents	(1)		0.2	(1)		0.2	0.1		0.3
32.5 and under 37.5 cents	0.2	0.1	.8	0.1	(1)	.7	.9	0.6	1.3
37.5 and under 42.5 cents	1.8	1.3	3.7	1.0	1.1	.7	6.6	2.9	13.9
42.5 and under 47.5 cents	3.4	2.4	7.2	1.7	1.6	2.5	13.8	9.1	23.1
47.5 and under 52.5 cents	4.5	3.6	7.7	2.6	2.5	3.2	16.4	12.9	23.0
52.5 and under 57.5 cents	5.0	4.0	8.9	3.5	2.6	7.9	14.4	15.7	12.0
57.5 and under 62.5 cents	7.4	7.4	7.2	5.5	4.9	8.2	18.9	26.9	3.8
62.5 and under 67.5 cents	7.6	6.8	10.6	6.9	5.9	11.8	11.6	14.1	6.6
67.5 and under 72.5 cents	9.1	9.9	6.1	9.5	10.1	7.0	6.6	8.6	2.8
72.5 and under 77.5 cents	10.7	11.3	8.5	11.8	12.3	9.4	4.0	3.2	5.4
77.5 and under 82.5 cents	12.7	12.9	11.8	14.3	13.9	14.8	2.8	3.1	2.2
82.5 and under 87.5 cents	6.8	7.1	5.7	7.7	8.0	6.8	1.2	.8	1.9
87.5 and under 92.5 cents	9.0	9.2	8.1	10.3	10.3	10.1	1.1	1.0	1.3
92.5 and under 97.5 cents	6.0	6.5	4.0	6.8	7.2	4.9	.9	.8	.9
97.5 and under 102.5 cents	5.0	5.7	2.5	5.8	6.4	3.3	.2	.3	
102.5 and under 107.5 cents	4.1	4.9	1.2	4.8	5.5	1.3	.2		.6
107.5 and under 112.5 cents	3.0	3.6	.6	3.5	4.1	.7			
112.5 and under 117.5 cents	2.0	2.2	1.2	2.3	2.4	1.5			
117.5 and under 122.5 cents	.6	.6	.5	.7	.7	.7			
122.5 and under 127.5 cents	.2	.2	.6	.3	.2	.7	.1		.3
127.5 and under 132.5 cents	.3	.1	1.0	.3	.1	1.2	.1		.3
132.5 and under 137.5 cents	.1	.1		.1	.1				
137.5 and under 142.5 cents	.2	(1)	.7	.2	(1)	.8	.1		.3
142.5 and under 147.5 cents	.1	(1)	.5	.1	(1)	.7			
147.5 cents and over	.2	.1	.7	.2	.1	.9			
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers	6,820	5,433	1,387	5,885	4,815	1,070	935	618	317
Average hourly earnings	$0.777	$0.793	$0.722	$0.809	$0.817	$0.775	$0.573	$0.594	$0.537
Midwestern region									
27.5 and under 32.5 cents	0.4	0.3	0.7	0.2	0.1	0.4	1.3	1.2	1.7
32.5 and under 37.5 cents	1.4	.6	3.6	.3	.1	.7	6.6	3.2	13.6
37.5 and under 42.5 cents	2.3	1.3	4.9	.5	.3	1.1	10.5	6.6	18.5
42.5 and under 47.5 cents	4.5	3.3	7.7	1.6	1.5	2.0	17.3	12.3	27.9
47.5 and under 52.5 cents	4.1	3.1	7.0	2.5	1.9	4.2	11.5	9.0	16.6
52.5 and under 57.5 cents	5.8	4.9	8.4	4.7	3.4	8.3	11.2	12.4	8.6
57.5 and under 62.5 cents	6.9	6.4	8.0	6.3	5.5	8.8	9.2	11.0	5.4
62.5 and under 67.5 cents	9.1	9.1	9.0	6.7	5.3	11.0	19.1	27.0	2.6
67.5 and under 72.5 cents	7.1	6.6	8.4	6.7	5.5	10.0	9.0	12.2	2.4
72.5 and under 77.5 cents	6.7	6.4	7.7	7.9	7.3	9.5	1.7	1.9	1.3
77.5 and under 82.5 cents	7.5	7.3	8.0	9.0	8.6	10.2	.9	1.3	.2
82.5 and under 87.5 cents	8.6	8.8	8.5	10.3	10.1	10.0	1.3	1.7	.4
87.5 and under 92.5 cents	8.9	10.2	5.6	10.8	12.0	7.1	.2	.2	.2
92.5 and under 97.5 cents	7.5	8.4	5.1	9.2	10.1	6.4	.1		.4
97.5 and under 102.5 cents	6.4	7.8	2.6	7.8	9.4	3.3			
102.5 and under 107.5 cents	5.9	7.4	1.7	7.2	8.9	2.1	.1		.2
107.5 and under 112.5 cents	2.5	3.3	.4	3.1	4.0	.5			
112.5 and under 117.5 cents	1.8	2.2	.5	2.1	2.7	.6			
117.5 and under 122.5 cents	1.0	1.2	.2	1.2	1.5	.3			
122.5 and under 127.5 cents	.8	.8	.7	.9	1.0	.8			
127.5 and under 132.5 cents	.4	.4	.1	.4	.5	.2			
132.5 and under 137.5 cents	.1	.1	.3	.2	.1	.4			
137.5 and under 142.5 cents	.1	.1	.1	.1	.1	.1			
142.5 and under 147.5 cents	(1)	(1)	.1	(1)	(1)	.1			
147.5 cents and over	.2	(1)	.7	.3	.1	.9			
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers	9,049	6,619	2,430	7,396	5,502	1,894	1,653	1,117	536
Average hourly earnings	$0.778	$0.813	$0.693	$0.828	$0.856	$0.754	$0.541	$0.582	$0.468

[1] Less than a tenth of 1 percent.

In all areas in which the industry is located, except the South, the proportion of workers receiving less than 40 cents—the ultimate floor to wages as set by the Fair Labor Standards Act—was negligible. In the South 6.6 percent of the workers averaged less than 40 cents per hour, and 9.8 percent less than 41 cents. This indicates a rather marked concentration of workers receiving exactly 40 cents an hour in the South.

It is of interest to note that average hourly earnings of production workers in the Akron and Detroit area, California, the Northeast region, and the Midwest region were higher than the average hourly earnings of nonproduction workers. This relationship obtained for both males and females. In the South, however, nonproduction workers, both male and female, earned more per hour than production workers.

Table 2 reveals that woman workers were of least relative importance in California and the South, except that in California a large proportion of all woman employees were nonproduction workers. In the Akron and Detroit area, females constituted just under 16 percent of the total labor force, while female nonproduction workers were a little more than a tenth of all the female workers. In California, female workers constituted 8.6 percent of the total employed, but almost 60 percent of all the female workers were employed in nonproduction jobs. In the Northeast region about 14 percent of all the employees were women, but just over a third of the women were engaged in nonproduction jobs. In the Midwest, about 18 percent of all the jobs in the industry were held by women and about a third of the women were engaged in nonproduction activities. In the South, only 7 percent of all the employees were women, but over 37 percent of these women were engaged in nonproduction jobs.

The distribution of workers by hourly earnings for each region clearly reveals the heterogeneous nature of the wage structure.

HOURLY EARNINGS OF WORKERS IN CENTRAL ADMINISTRATIVE OFFICES

More than 4,700 central administrative workers in the tire and tube industry were reported in the questionnaire survey. Male workers slightly outnumbered females, there being 2,537 of the former as compared to 2,204 of the latter. Males averaged 91.5 cents an hour, as compared to only 58.9 cents an hour for female workers. This difference of over 30 cents an hour probably implies that the jobs held by male workers required more training and responsibility than did those held by female workers in the same offices. Indeed, 40 percent of the male workers earned as much as 97.5 cents per hour or more. Such wages are not ordinarily paid for simple clerical work. A negligible percentage of female central administrative workers earned such hourly wages. The bulk of the female workers (72.8 percent)

averaged 37.5 and under 67.5 cents an hour. No similar concentration for any 30-cent wage range was shown for male employees.

Rubber Boot and Shoe Industry

The rubber boot and shoe industry manufactures "all rubber footwear, waterproof fabric upper footwear, and other fabric upper footwear having rubber soles." [6] The number of plants in this industry has not varied widely since 1933, when there were 13. In 1935 and 1937 only 12 plants were reported; in 1939, however, 13 were reported. According to a preliminary report of the Census of Manufactures, the average number of wage earners reported employed in the industry in 1939 was 14,861. In the same year the total wage bill was $16,802,000, or approximately the average pay roll of each of the census years of 1933, 1935, and 1937.

Thirteen completed questionnaires were received from plants in the rubber boot and shoe industry. The number of workers, including wage earners and clerical workers, employed in the 13 plants was 15,988, or approximately 95 percent of the 16,962 workers reported by the Census of Manufactures, 1939.

The location of the plants reporting in the questionnaire survey corresponds fairly closely to that of plants enumerated by the Census of Manufactures.[7] Eight of the 13 plants of the industry were in the New England States of Massachusetts, Connecticut, and Rhode Island. The four plants in Massachusetts provided jobs for over 5,200 workers. The two Connecticut establishments together employed nearly 5,000 workers; one of these plants employed fewer than 1,000 workers. The two plants in Rhode Island employed fewer than 1,000 workers.

Two plants in the industry were found in Maryland. These plants were not reported in the Census of Manufactures in 1937. The combined employment of these plants was fewer than 1,000 workers. Reports were received from 3 plants in the East North Central region (Illinois, Indiana, and Wisconsin). The labor force of these plants varied from scarcely more than 500 to over 2,500. No plant in the State of Missouri was reported in the present survey.

SUMMARY OF AVERAGE HOURLY AND WEEKLY EARNINGS

Plants in the boot and shoe industry, like those in the other rubber industries, supplied data regarding hours of work and earnings of their workers, by sex and class of work. The class of workers re-

[6] Census of Manufactures, 1939. Preliminary report on rubber boots and shoes released September 14, 1940.

[7] According to the 1937 Census of Manufactures, the plants in the industry were located in the States of Connecticut, Illinois, Indiana, Massachusetts, Missouri, New Jersey, Rhode Island, and Wisconsin. The smallest of these plants employs between 100 to 250 workers, while the largest employs over 2,500 workers. The typical plant, however, employs between 500 and 1,000 workers.

ported separately were the same as those discussed in connection with the tire and tube industry, namely, "production workers" and "nonproduction workers."

Table 3 presents the number of employees reported, by sex and class of work, and their average hourly earnings, average weekly "hours paid for," and average weekly earnings.

TABLE 3.—*Average Hourly Earnings, Weekly Hours Paid for, and Weekly Earnings of Rubber Boot and Shoe Workers, by Sex and Class of Work, May 1940*

Sex and class of work	Number of workers	Average hourly earnings	Average weekly hours paid for	Average weekly earnings
All workers	15,988	$0.586	37.3	$21.86
Production	13,306	.583	36.5	21.32
Nonproduction	2,682	.596	41.1	24.51
Males	7,799	.686	38.1	26.14
Production	6,291	.685	37.1	25.42
Nonproduction	1,508	.691	42.2	29.15
Females	8,189	.486	36.6	17.77
Production	7,015	.490	36.0	17.64
Nonproduction	1,174	.466	39.8	18.56

The average hourly earnings of all workers combined was 58.6 cents, production workers receiving 58.3 cents per hour and nonproduction workers 59.6 cents. Males averaged 20 cents an hour more than females, or 68.6 cents as compared to 48.6 cents.

It is of interest to note that male and female workers are employed in approximately equal numbers in this industry. Furthermore, among the workers of each sex, the percentages of nonproduction workers are about the same—19 percent for males and 14 percent for females.

Because of the longer workweek, the average weekly earnings of male and female nonproduction workers, $29.15 and $18.56, respectively, tended to be higher than the weekly earnings of production workers in the corresponding groups, $25.42 and $17.46.

An examination of the questionnaire schedules received from the reporting members of the industry indicates that there are no well-defined regional differences in wage structure. The individual plants of the industry paid general average hourly wages ranging from less than 35 cents to nearly 70 cents. More than half of the plants in the industry, however, averaged from 45 to 60 cents an hour.

HOURLY EARNINGS BY SEX AND CLASS OF WORK

The distribution of workers according to average hourly earnings, by sex and class of work is given in table 4.

TABLE 4.—*Percentage Distribution of Rubber Boot and Shoe Workers, by Average Hourly Earnings, Sex, and Class of Work, May 1940*

Average hourly earnings	All workers			Males			Females		
	Total	Production	Nonproduction	Total	Production	Nonproduction	Total	Production	Nonproduction
Under 27.5 cents	(1)	(1)					(1)	(1)	
27.5 and under 32.5 cents	2.6	2.9	1.4	1.8	1.9	1.5	3.4	3.7	1.3
32.5 and under 37.5 cents	4.5	4.6	3.8	2.0	2.4	.6	6.8	6.6	7.9
37.5 and under 42.5 cents	8.8	8.0	12.6	2.6	2.7	2.3	14.7	12.8	25.9
42.5 and under 47.5 cents	10.7	10.1	13.6	3.4	3.4	3.2	17.6	16.1	26.7
47.5 and under 52.5 cents	13.6	14.2	10.6	6.1	6.5	4.8	20.6	21.1	18.1
52.5 and under 57.5 cents	14.8	15.9	9.6	7.7	6.8	11.3	21.6	23.9	7.5
57.5 and under 62.5 cents	10.1	10.2	9.8	9.9	9.0	13.3	10.4	11.2	5.4
62.5 and under 67.5 cents	6.8	6.6	7.8	10.4	10.3	10.9	3.3	3.3	3.8
67.5 and under 72.5 cents	6.5	6.4	7.2	12.5	12.6	11.5	.9	.8	1.5
72.5 and under 77.5 cents	7.0	6.9	7.1	14.0	14.5	12.2	.3	.3	.6
77.5 and under 82.5 cents	5.6	5.6	5.4	11.3	11.8	9.0	.2	.1	.9
82.5 and under 87.5 cents	3.9	4.0	3.6	8.0	8.4	6.2	.1	(1)	.3
87.5 and under 92.5 cents	2.3	2.0	3.6	4.6	4.1	6.3	.1	.1	.1
92.5 and under 97.5 cents	1.2	1.1	1.7	2.5	2.4	3.0			
97.5 and under 102.5 cents	.8	.8	.9	1.7	1.7	1.6			
102.5 and under 107.5 cents	.4	.4	.3	.7	.8	.6			
107.5 and under 112.5 cents	.2	.2	.3	.4	.4	.5			
112.5 cents and over	.2	.1	.7	.4	.3	1.2			
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers	15,988	13,306	2,682	7,799	6,291	1,508	8,189	7,015	1,174
Average hourly earnings	$0.586	$0.583	$0.596	$0.686	$0.685	$0.691	$0.486	$0.490	$0.466

[1] Less than a tenth of 1 percent.

It has been noted above that, although male workers tended to earn more per hour than female workers, the differences in average hourly wages between production and nonproduction workers were not great. Table 4 indicates that the distribution of male production and nonproduction workers by specified hourly wages were also generally similar. This does not hold, however, for female production and nonproduction employees. For example, over 60 percent of all female nonproduction workers (a class which includes office clerks, stenographers, and typists, as well as the lower-paid cleaning force) averaged less than 47.5 cents an hour, while less than 40 percent of the production workers received hourly wages this low.

"Other Rubber Goods" Industry

That part of the rubber products manufacturing industry designated as the "other rubber goods" industry includes a heterogeneous class of establishments producing such diverse products as rubber heels and soles, mechanical rubber goods, rubber balls, toys, and balloons, druggists', household, and stationers' rubber sundries, rubber cements, fabrics, reclaimed rubber, etc. Many individual plants in this group produce several of the products enumerated.

In 1933 there were 351 firms reported by the Census of Manufactures as coming within the "other rubber goods" industry. This number has

increased since that year, so that in 1935, 412 firms were reported; in 1937, 420 firms; and in 1939, 529 firms.[8] Employment of wage earners in this industry has also expanded sharply, increasing from roughly 35,000 in 1933 to 40,000 in 1935, 48,000 in 1937, and 52,000 in 1939.

According to the Census of Manufactures, there were in 1939, 529 plants in the "other rubber goods" industry. Usable questionnaire returns were received from 299 of these plants, or about 57 percent of them. In terms of employment, however, more than 80 percent of the clerical and factory workers of the plants reporting to the Census of Manufactures were covered in the present report. Fairly comprehensive samples of plants were secured for each branch of the industry. The smallest proportionate sample was obtained in the rubber heels and soles branch, where about half of the employees reported in the Census of Manufactures were covered in the present survey. In the sundries branch the number of employees reported in the questionnaire survey exceeded the number of employees reported in that census by 20 percent. About 70 percent of the workers reported in the rubber balls, toys, and balloons branch by the Census of Manufactures, and 80 percent in the mechanical rubber goods branch and miscellaneous branch were covered in the present survey.

SUMMARY OF AVERAGE HOURLY AND WEEKLY EARNINGS

As has been pointed out, the "other rubber goods" industry includes a group of minor industries whose products are not homogeneous. There are also important differences in the skill required of the labor force in the several industries, the location of the industries, and the degree of unionization. These factors should be kept in mind in reviewing the tables referring to the industry as a whole.

Table 5 summarizes for the industry, by branch and region, the number of workers by sex and class of work, their average hourly earnings, average weekly "hours paid for," and average weekly earnings. It will be seen that hourly earnings throughout the industry averaged 60.5 cents and were lowest in the Southern region (45.0 cents) and highest in the Western region (65.7 cents).[9] In the entire industry, nonproduction workers (65.6 cents) averaged more than production workers (59.1 cents). Of the six branches for which separate figures are available, the reclaimed rubber branch paid the highest average hourly wage (76.9 cents) and the rubber balls, toys, and balloons branch the lowest (44.6 cents).

[8] In 1939, for the first time, the Census of Manufactures classified establishments primarily engaged in reclaiming rubber as a separate industry, and excluded them from the "other rubber goods" industry. Ten such establishments were reported. In the present report, the reclaimed rubber industry is included as a branch of "other rubber goods" and the census figures for 1939 represent both groups of plants.

[9] The regions established for the industry as a whole were as follows: The New England region, including the States of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; the Middle Atlantic region, including the States of New Jersey, New York, and Pennsylvania; the Southern region, including the States of Delaware, Georgia, Kentucky, Maryland, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia; the Midwestern region, including the States of Colorado, Illinois, Indiana, Iowa, Michigan, Minnesota, Nebraska, Ohio, and Wisconsin; and the Western region, including the States of California and Oregon.

TABLE 5.—*Average Hourly Earnings, Weekly Hours Paid For, and Weekly Earnings in the "Other Rubber Goods" Industry, by Branch, Region, Class of Work, and Sex, May 1940*

Region and class of work	All workers			Males					Females			
	Number of workers	Average hourly earnings	Average weekly hours paid for	Average weekly earnings	Number of workers	Average hourly earnings	Average weekly hours paid for	Average weekly earnings	Number of workers	Average hourly earnings	Average weekly hours paid for	Average weekly earnings
All branches												
United States	44,192	$0.605	38.3	$23.21	31,412	$0.662	39.0	$25.83	12,780	$0.457	36.8	$16.79
Production	35,078	.691	37.4	22.12	24,605	.649	38.0	24.67	10,473	.446	36.1	16.11
Nonproduction	9,114	.656	41.8	27.43	6,807	.705	42.6	29.99	2,307	.500	39.7	19.86
New England region	11,995	.542	39.1	21.15	7,687	.594	39.9	23.68	4,308	.443	37.6	16.66
Production	9,611	.527	38.3	20.20	6,028	.578	38.9	22.51	3,583	.437	37.3	16.32
Nonproduction	2,384	.594	42.1	25.03	1,659	.644	43.4	27.95	725	.467	39.3	18.36
Middle Atlantic region	10,390	.629	38.7	24.35	7,994	.674	38.9	26.21	2,396	.475	38.2	18.14
Production	7,912	.615	38.0	23.36	6,089	.662	38.0	25.18	1,823	.457	37.8	17.28
Nonproduction	2,478	.667	41.2	27.50	1,905	.706	41.8	29.50	573	.530	39.3	20.85
Southern region	2,159	.450	37.9	17.07	1,474	.486	38.2	18.57	685	.371	37.4	13.86
Production	1,883	.440	37.6	16.54	1,275	.481	37.8	18.20	608	.351	37.2	13.05
Nonproduction	276	.518	40.1	20.74	199	.517	40.4	20.91	77	.519	39.1	20.32
Midwestern region	18,528	.650	37.6	24.42	13,334	.714	38.5	27.48	5,194	.469	35.2	16.54
Production	14,754	.637	36.4	23.16	10,438	.703	37.3	26.20	4,316	.462	34.2	15.80
Nonproduction	3,774	.693	42.3	29.35	2,896	.749	42.9	32.13	878	.498	40.6	20.18
Western region	1,120	.657	40.4	26.53	923	.683	40.9	27.97	197	.524	37.7	19.77
Production	918	.645	40.6	26.18	775	.671	41.2	27.64	143	.485	37.6	18.25
Nonproduction	202	.716	39.2	28.12	148	.748	39.7	29.70	54	.626	38.0	23.79
Mechanical rubber goods branch [1]												
United States [2]	24,184	$0.658	38.8	$25.53	18,953	$0.700	39.3	$27.49	5,231	$0.496	37.2	$18.45
Production	18,359	.652	37.8	24.66	14,503	.692	38.3	26.49	3,856	.492	36.1	17.77
Nonproduction	5,825	.675	41.9	28.29	4,450	.723	42.5	30.74	1,375	.507	40.1	20.35
New England region	3,120	.552	40.6	22.43	2,295	.592	41.1	24.31	825	.436	39.4	17.18
Production	2,328	.543	40.1	21.75	1,757	.583	40.5	23.58	571	.414	39.0	16.11
Nonproduction	792	.579	42.2	24.41	538	.620	43.1	26.69	254	.496	40.3	19.88

[1] Includes mechanical rubber goods, rubber flooring, rubber mats, and hard rubber goods except druggists' sundries.

[2] Includes data for the Southern and Western regions for which separate tabulations were not made.

TABLE 5.—*Average Hourly Earnings, Weekly Hours Paid For, and Weekly Earnings in the "Other Rubber Goods" Industry, by Branch, Region, Class of Work, and Sex, May 1940*—Continued

Region and class of work	All workers				Males				Females			
	Number of workers	Average hourly earnings	Average weekly hours paid for	Average weekly earnings	Number of workers	Average hourly earnings	Average weekly hours paid for	Average weekly earnings	Number of workers	Average hourly earnings	Average weekly hours paid for	Average weekly earnings
	Mechanical rubber goods branch—Continued											
Middle Atlantic region	7,398	$0.662	38.5	$25.47	6,027	$0.695	38.6	$26.83	1,371	$0.516	37.8	$19.51
Production	5,509	.660	37.7	24.86	4,575	.689	37.8	26.03	934	.514	37.2	19.14
Nonproduction	1,889	.669	40.7	27.27	1,452	.712	41.2	29.37	437	.519	39.1	20.30
Midwestern region	12,257	.690	38.5	26.58	9,469	.740	39.2	29.01	2,788	.506	36.2	18.31
Production	9,360	.685	37.2	25.48	7,187	.734	37.9	27.82	2,173	.508	34.9	17.73
Nonproduction	2,897	.704	42.8	30.13	2,282	.756	43.4	32.76	615	.499	40.8	20.36
	Reclaimed rubber branch [3]											
All workers	1,095	$0.769	35.3	$27.18								
Production	902	.756	34.2	25.81								
Nonproduction	193	.821	40.9	33.62								
	Rubber heels and soles branch											
United States	3,502	$0.487	35.6	$17.31	2,344	$0.530	37.2	$19.71	1,158	$0.384	32.4	$12.44
Production	2,984	.473	34.1	16.16	1,942	.517	35.6	18.41	1,042	.380	31.4	11.96
Nonproduction	518	.546	43.8	23.92	402	.580	44.8	25.98	116	.413	40.5	16.75
New England region	1,902	.499	35.9	17.91	1,399	.530	37.4	19.83	503	.395	31.7	12.55
Production	1,604	.481	34.2	16.47	1,174	.511	35.6	18.20	430	.387	30.4	11.75
Nonproduction	298	.571	44.9	25.65	225	.609	46.6	28.38	73	.434	39.8	17.26
All other regions	1,600	.472	35.2	16.59	945	.530	36.8	19.53	655	.376	32.8	12.36
Production	1,380	.464	34.0	15.80	768	.528	35.5	18.74	612	.376	32.2	12.11
Nonproduction	220	.509	42.4	21.57	177	.540	42.5	22.94	43	.380	41.8	15.90

Rubber balls, toys, and balloons branch

Rubber balls, toys, and balloons branch												
United States	1,788	$0.446	37.3	$16.61	951	$0.491	38.7	$18.99	837	$0.390	35.7	$13.91
Production	1,498	.433	36.3	15.70	788	.480	37.2	17.87	710	.378	35.2	13.28
Nonproduction	290	.503	42.5	21.36	163	.536	45.6	24.42	127	.453	38.5	17.43
Midwestern region	1,238	.443	36.6	16.20	614	.500	38.1	19.07	624	.382	35.1	13.38
Production	1,102	.427	35.5	15.16	537	.487	36.7	17.86	565	.366	34.4	12.60
Nonproduction	136	.547	45.0	24.60	77	.573	47.9	27.46	59	.507	41.1	20.86
All other regions	550	.452	38.8	17.55	337	.475	39.7	18.86	213	.412	37.5	15.47
Production	396	.448	38.3	17.17	251	.466	38.4	17.88	145	.418	38.2	15.95
Nonproduction	154	.460	40.2	18.50	86	.499	43.5	21.70	68	.399	36.2	14.46
Rubber sundries branch [4]												
United States [5]	5,986	$0.529	37.6	$19.89	3,081	$0.625	38.1	$23.86	2,905	$0.423	37.0	$15.67
Production	5,110	.510	37.2	18.96	2,483	.610	37.6	22.93	2,627	.413	36.8	15.22
Nonproduction	876	.633	39.9	25.27	598	.686	40.5	27.74	278	.516	38.7	19.97
New England region	2,291	.511	38.6	19.70	1,155	.603	39.0	23.53	1,136	.415	38.1	15.80
Production	1,922	.489	38.0	18.59	903	.583	38.0	22.17	1,019	.406	37.9	15.42
Nonproduction	369	.614	41.5	25.47	252	.669	42.5	28.41	117	.485	39.5	19.14
Middle Atlantic region	1,289	.527	39.6	20.89	622	.658	39.9	26.26	667	.404	39.4	15.89
Production	1,094	.499	39.7	19.80	484	.644	39.8	25.60	610	.384	39.6	15.20
Nonproduction	195	.684	39.5	27.03	138	.705	40.5	28.57	57	.626	37.2	23.29
Midwestern region	2,244	.561	35.3	19.83	1,213	.647	36.3	23.52	1,031	.454	34.1	15.49
Production	1,947	.550	34.8	19.18	1,016	.637	36.0	22.90	931	.450	33.6	15.13
Nonproduction	297	.626	38.5	24.09	197	.698	38.3	26.74	100	.486	38.8	18.85
Miscellaneous rubber goods branch [6]												
United States [5]	7,637	$0.562	39.4	$22.16	4,495	$0.612	40.2	$24.61	2,642	$0.462	37.9	$17.53
Production	6,225	.543	38.8	21.08	3,987	.590	39.5	23.30	2,238	.455	37.6	17.12
Nonproduction	1,412	.642	41.9	26.91	1,008	.693	43.0	29.77	404	.502	39.4	19.79
New England and Middle Atlantic regions	5,390	.575	39.9	22.95	3,419	.628	40.9	25.68	1,971	.477	38.2	18.21
Production	4,310	.557	39.3	21.91	2,623	.606	40.2	24.38	1,687	.476	37.9	18.06
Nonproduction	1,080	.644	42.1	27.12	796	.696	43.1	29.98	284	.484	39.4	19.08
Midwestern region	1,809	.528	38.1	20.10	1,226	.583	38.4	22.40	583	.409	37.3	15.27
Production	1,533	.509	37.4	19.02	1,043	.564	37.7	21.25	490	.389	36.8	14.28
Nonproduction	276	.623	41.9	26.11	183	.677	42.8	28.97	93	.509	40.2	20.48

[2] Includes data for the Southern and Western regions for which separate tabulations were not made.
[3] Only 7 females were reported.
[4] Includes druggists', stationers', and household sundries, rubber bands, and rubber gloves.
[5] Includes data for Southern region for which separate tabulation was not made.
[6] Includes rubberized fabric, rubber cement, gutta-percha, sponge rubber, latex, camel-back, tire repair materials, etc.

Average weekly earnings of all workers in the "other rubber goods" industry were $23.21. The lowest average weekly earnings of production workers were $15.16 earned by employees in the rubber balls, toys, and balloons branch, in the Midwest region. The highest average weekly earnings were $25.48, earned by mechanical rubber goods workers in the Midwest region. The lowest weekly earnings received by nonproduction workers were $18.50 in the rubber balls, toys, and balloons branch in the regions exclusive of the Midwest. The highest earnings of nonproduction workers were $30.13, earned by the mechanical rubber goods workers in the Midwest region.[10]

HOURLY EARNINGS IN SPECIFIED BRANCHES

Mechanical Rubber Goods Branch

From the viewpoint of employment, the largest single division of the "other rubber goods" industry is that manufacturing mechanical rubber goods. This division of the industry produces heavy and light beltings, mechanical parts, rubber sheetings, floorings, hose, mats, battery parts, packings, toilet seats, and so forth. According to the 1939 Census of Manufactures, there were 173 establishments engaged in the production of mechanical rubber goods. These establishments employed 27,690 full-time and part-time wage workers, and about 2,500 clerical employees.

Well over one-half of all workers in this branch received hourly earnings of 47.5 and under 77.5 cents. Female workers, however, were largely concentrated in the wage intervals of 32.5 and under 57.5 cents an hour. In this range were found almost three-fourths of the female workers. The relative distributions of production and nonproduction workers, both male and female, were generally similar.

The mechanical rubber goods branch of the "other rubber goods" industries was located principally in 3 regions: The Midwest region, the Middle Atlantic region, and the New England region. About one-half (12,257) of the workers were found in the Midwest region, 7,398 were found in the Middle Atlantic region, and only 3,120 in New England. Reporting establishments in the West employed 866 workers, and in the South 543 workers.[11]

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[10] 254 workers were reported as working in central administrative offices of firms in the "other rubber goods" industry. These workers (not included in the above totals) averaged 60.8 cents an hour, males 68.0 cents, and females 56.2 cents.

[11] In both the Southern and Western regions, employment was concentrated in relatively few plants; consequently wage data pertaining to these regions have not been presented separately.

TABLE 6.—*Percentage Distribution of Workers in Mechanical Rubber Goods Branch, by Average Hourly Earnings, Sex, and Class of Work, United States, May 1940*

Average hourly earnings	All workers			Males			Females		
	Total	Production	Nonproduction	Total	Production	Nonproduction	Total	Production	Nonproduction
27.5 and under 32.5 cents	0.9	0.9	0.9	0.4	0.2	0.9	2.7	3.2	1.2
32.5 and under 37.5 cents	3.3	3.5	2.9	1.1	1.1	1.4	11.2	12.5	7.8
37.5 and under 42.5 cents	6.9	6.9	7.0	3.5	3.6	3.5	19.2	19.7	18.4
42.5 and under 47.5 cents	7.4	7.3	7.6	4.3	4.4	3.7	18.6	18.1	19.9
47.5 and under 52.5 cents	10.8	11.0	9.9	10.1	10.7	8.2	13.4	12.7	15.3
52.5 and under 57.5 cents	9.9	9.8	10.4	9.6	9.6	9.6	10.9	10.3	12.5
57.5 and under 62.5 cents	10.5	10.6	10.2	10.9	11.0	10.7	8.8	9.0	8.1
62.5 and under 67.5 cents	9.1	9.3	8.8	10.1	10.3	9.6	5.7	5.5	6.0
67.5 and under 72.5 cents	8.2	8.4	7.5	9.4	9.6	8.5	4.1	4.0	4.1
72.5 and under 77.5 cents	6.9	7.1	6.4	8.2	8.3	7.6	2.4	2.4	2.6
77.5 and under 82.5 cents	5.8	5.9	5.4	7.1	7.2	6.8	1.1	1.1	1.2
82.5 and under 87.5 cents	5.3	5.3	5.1	6.5	6.6	6.4	.6	.5	.9
87.5 and under 92.5 cents	4.2	4.2	4.4	5.3	5.2	5.6	.4	.3	.7
92.5 and under 97.5 cents	3.1	3.2	2.7	3.8	3.9	3.5	.3	.3	.2
97.5 and under 102.5 cents	2.8	2.8	2.8	3.6	3.6	3.7	.1	.1	.1
102.5 and under 107.5 cents	1.9	1.8	2.4	2.4	2.2	2.9	.2	(1)	.6
107.5 and under 112.5 cents	.9	.6	1.5	1.1	.8	2.0	.1	.1	.1
112.5 and under 117.5 cents	.6	.3	1.4	.7	.4	1.9	.1	.1	-------
117.5 and under 122.5 cents	.5	.3	1.0	.6	.4	1.2	.1	.1	.2
122.5 and under 127.5 cents	.4	.3	.5	.5	.4	.7	-------	-------	-------
127.5 and under 132.5 cents	.3	.3	.5	.4	.3	.7	-------	-------	-------
132.5 cents and over	.3	.2	.7	.4	.2	.9	(1)	-------	.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers	24,184	18,359	5,825	18,953	14,503	4,450	5,231	3,856	1,375
Average hourly earnings	$0.658	$0.652	$0.675	$0.700	$0.692	$0.723	$0.496	$0.492	$0.507

[1] Less than a tenth of 1 percent.

Reclaimed Rubber Branch

According to the Census of Manufactures of 1939, there were 10 establishments in the reclaimed rubber division of the "other rubber goods" industry. These plants employed 1,072 wage earners and 40 clerical employees. Their total wage bill came to approximately $1,477,000, the average annual earnings of full- and part-time workers combined approximating $1,378. The product manufactured was valued at approximately $7,000,000 in 1939.

TABLE 7.—*Percentage Distribution of Workers in Reclaimed Rubber Branch, by Average Hourly Earnings and Class of Work, United States, May 1940*

Average hourly earnings (in cents)	All workers [1]	Production	Nonproduction	Average hourly earnings (in cents)	All workers [1]	Production	Nonproduction
32.5 and under 37.5	0.4	0.4	-------	92.5 and under 97.5	11.7	12.4	8.3
37.5 and under 42.5	2.1	2.2	1.6	97.5 and under 102.5	5.2	5.4	4.1
42.5 and under 47.5	2.9	3.4	.5	102.5 and under 107.5	2.2	1.7	4.7
47.5 and under 52.5	9.4	10.4	4.7	107.5 and under 112.5	4.7	4.0	8.3
52.5 and under 57.5	4.7	4.0	7.8	112.5 and under 117.5	2.2	.8	8.8
57.5 and under 62.5	10.7	11.8	5.7	117.5 and under 122.5	.4	.3	.5
62.5 and under 67.5	3.8	3.0	7.8	122.5 and under 127.5	.5	-------	2.6
67.5 and under 72.5	4.5	4.7	3.6				
72.5 and under 77.5	6.1	6.3	5.2	Total	100.0	100.0	100.0
77.5 and under 82.5	8.3	7.0	14.4				
82.5 and under 87.5	13.9	15.2	8.3	Number of workers	1,095	902	193
87.5 and under 92.5	6.3	7.0	3.1	Average hourly earnings	$0.769	$0.756	$0.821

[1] Only 7 females were reported.

Reports were received in the questionnaire survey from 8 plants in the reclaimed rubber branch, which employed 1,095 workers, only 7 of whom were females. The average hourly earnings of all workers were 76.9 cents, production workers averaging 75.6 cents, and nonproduction workers 82.1 cents. Of the production workers, about a quarter earned 47.5 and under 62.5 cents, and over a third earned 82.5 and under 97.5 cents. Nonproduction workers were scattered among the various wage classes. About a quarter of these workers earned 77.5 and under 87.5 cents.

Rubber Heels and Soles Branch

According to the Census of Manufactures of 1939, there were 30 establishments producing heels and soles. These establishments employed 7,227 workers, of whom 352 were clerical workers and 6,875 were full- or part-time wage earners.[1]

Information in the questionnaire survey was received from 20 plants employing 3,502 workers; 2,344 male workers were reported and 1,158 female workers. The proportion of nonproduction workers was small, only 402 male and 116 female nonproduction workers having been reported. Male workers averaged 53.0 cents an hour—nonproduction workers 58.0 cents and production workers 51.7 cents. Female workers averaged 38.4 cents an hour—nonproduction workers 41.3 cents and production workers 38.0 cents.

TABLE 8.—*Percentage Distribution of Workers in Rubber Heels and Soles Branch, by Average Hourly Earnings, Sex, and Class of Work, United States, May 1940*

Average hourly earnings	All workers			Males			Females		
	Total	Production	Nonproduction	Total	Production	Nonproduction	Total	Production	Nonproduction
27.5 and under 32.5 cents	10.2	11.1	5.4	2.3	2.3	2.2	26.3	27.4	16.4
32.5 and under 37.5 cents	12.6	12.7	11.6	8.0	8.2	7.2	21.8	21.3	26.5
37.5 and under 42.5 cents	23.8	25.2	15.6	24.6	26.5	15.5	22.4	23.0	16.4
42.5 and under 47.5 cents	11.7	11.7	11.6	11.2	11.5	10.2	12.3	11.9	16.4
47.5 and under 52.5 cents	8.9	9.0	8.7	9.6	9.7	9.2	7.6	7.7	6.9
52.5 and under 57.5 cents	7.8	7.3	11.0	9.3	8.9	11.5	4.8	4.3	9.5
57.5 and under 62.5 cents	7.2	6.9	8.9	9.4	9.0	11.2	2.7	2.9	.9
62.5 and under 67.5 cents	6.9	7.1	5.8	9.6	10.3	6.0	1.6	1.2	5.2
67.5 and under 72.5 cents	3.6	3.0	6.8	5.2	4.6	8.5	.2	.1	.9
72.5 and under 77.5 cents	1.2	.9	3.1	1.7	1.2	3.7	.3	.2	.9
77.5 and under 82.5 cents	1.9	1.9	1.9	2.8	2.9	2.5	-------	-------	-------
82.5 and under 87.5 cents	1.4	1.3	1.9	2.1	2.0	2.5	-------	-------	-------
87.5 and under 92.5 cents	1.1	.9	2.1	1.6	1.3	2.7	-------	-------	-------
92.5 and under 97.5 cents	.6	.4	1.4	.9	.7	1.7	-------	-------	-------
97.5 and under 102.5 cents	.5	.3	2.1	.8	.4	2.7	-------	-------	-------
102.5 cents and over	.6	.3	2.1	.9	.5	2.7	-------	-------	-------
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers	3,502	2,984	518	2,344	1,942	402	1,158	1,042	116
Average hourly earnings	$0.487	$0.473	$0.546	$0.530	$0.517	$0.580	$0.384	$0.380	$0.413

More than half of the employees in the rubber heels and soles branch were reported in New England (1,902). The number of workers reported in the other regions were employed in too few plants to permit the presentation of separate wage data. Hourly earnings in New England were, in general, slightly higher than those in the other regions in which the industry is located.

Rubber Balls, Toys, and Balloons Branch

The rubber balls, toys, and balloons branch of the "other rubber goods" industry, according to the Census of Manufactures, was composed in 1939 of 22 establishments employing 2,594 workers; of these 118 were clerical workers and 2,476 were full- or part-time wage earners.

In all, 1,788 workers, employed in 20 plants, were reported in the questionnaire survey of May 1940 as engaged in making balls, toys, and balloons. Males numbered 951 and females 837. The average hourly earnings of workers in the industry were 44.6 cents an hour, males averaging 49.1 cents and females 39 cents. Male production workers earned 48 cents an hour, as compared to 53.6 cents an hour for nonproduction workers. Female production workers earned 37.8 cents an hour, as compared with 45.3 cents for nonproduction workers. The overwhelming majority of workers in each sex and class of work group were concentrated in the wage class under 47.5 cents an hour.

TABLE 9.—*Percentage Distribution of Workers in Rubber Balls, Toys, and Balloons Branch, by Average Hourly Earnings, Sex, and Class of Work, United States, May 1940*

Average hourly earnings	All workers			Males			Females		
	Total	Production	Nonproduction	Total	Production	Nonproduction	Total	Production	Nonproduction
Under 27.5 cents	0.5	0.3	1.7	0.2	0.3	-------	0.8	0.3	3.9
27.5 and under 32.5 cents	16.2	18.6	3.4	8.1	9.5	1.2	25.4	28.9	6.3
32.5 and under 37.5 cents	19.1	18.6	21.5	13.0	12.3	16.7	26.0	25.6	27.5
37.5 and under 42.5 cents	17.9	18.2	16.3	15.6	14.8	19.1	20.5	22.0	12.6
42.5 and under 47.5 cents	12.2	11.8	14.5	14.3	14.8	11.0	10.0	8.5	18.9
47.5 and under 52.5 cents	14.2	14.0	15.3	15.6	15.8	14.8	12.7	12.1	15.7
52.5 and under 57.5 cents	7.6	8.1	4.8	12.6	13.8	6.7	1.8	1.7	2.4
57.5 and under 62.5 cents	4.4	4.1	6.2	7.4	7.0	9.2	1.1	.8	2.4
62.5 and under 67.5 cents	2.5	2.7	1.7	4.4	4.9	1.8	.4	.1	1.6
67.5 and under 72.5 cents	1.7	1.2	4.1	2.8	2.3	5.5	.4	-------	2.4
72.5 and under 77.5 cents	1.5	1.3	2.4	2.6	2.4	3.7	.1	-------	.8
77.5 and under 82.5 cents	.4	.5	.3	.7	.9	-------	.1	-------	.8
82.5 and under 87.5 cents	.4	-------	2.4	.3	-------	1.8	.5	-------	3.1
87.5 and under 92.5 cents	.2	.2	.3	.3	.4	-------	.1	-------	.8
92.5 and under 97.5 cents	.2	.1	1.0	.4	.1	1.8	-------	-------	-------
97.5 and under 102.5 cents	.3	.2	.7	.5	.4	1.2	-------	-------	-------
102.5 cents and over	.7	.1	3.4	1.2	.3	5.5	.1	-------	.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers	1,788	1,498	290	951	788	163	837	710	127
Average hourly earnings	$0.446	$0.433	$0.503	$0.491	$0.480	$0.536	$0.390	$0.378	$0.453

Rubber Sundries Branch

The 1939 Census of Manufactures reported 63 plants employing 5,004 workers in the druggists', stationers', and household rubber supplies branch of the "other rubber goods" industry. The vast majority of these employees (4,759) were full- or part-time wage earners. This branch of the industry produces a variety of small rubber articles, such as rubber bands, hot water bottles, rubber gloves, syringes, dental goods, rubber-impregnated bandages, dipped goods, adhesive tapes, rubber display figures, porous and corn plasters, rubber keys for typewriters, etc.

Workers reported in the May 1940 questionnaire survey in this branch of the industry numbered 5,986. They were employed in 50 plants. These workers earned on the average 52.9 cents an hour, the 3,081 males averaging 62.5 cents and the 2,905 females 42.3 cents.

Nearly 2,500 male workers were reported as engaged in production activities. They averaged 61 cents an hour. The 598 male nonproduction workers averaged 68.6 cents an hour. More than 8 percent of the nonproduction workers earned in excess of $1.125 an hour, while less than 2 percent of production workers earned such wages.

TABLE 10.—*Percentage Distribution of Workers in Rubber Sundries Branch, by Average Hourly Earnings, Sex, and Class of Work, United States, May 1940*

Average hourly earnings	All workers			Males			Females		
	Total	Production	Nonproduction	Total	Production	Nonproduction	Total	Production	Nonproduction
Under 27.5 cents	0.1	0.1					0.1	0.1	
27.5 and under 32.5 cents	6.6	7.4	1.8	2.5	2.8	1.3	11.0	11.8	2.9
32.5 and under 37.5 cents	14.6	16.3	4.1	3.3	3.7	2.0	26.6	28.5	8.6
37.5 and under 42.5 cents	14.0	14.9	9.1	7.5	8.0	5.4	21.0	21.4	17.2
42.5 and under 47.5 cents	15.2	15.2	15.4	13.9	14.2	12.4	16.8	16.4	21.5
47.5 and under 52.5 cents	8.1	7.8	9.6	9.4	9.6	8.9	6.6	6.2	11.2
52.5 and under 57.5 cents	9.0	8.8	9.9	10.5	10.5	10.4	7.5	7.3	9.0
57.5 and under 62.5 cents	7.7	7.6	8.1	9.7	10.1	7.9	5.5	5.1	8.6
62.5 and under 67.5 cents	6.5	5.9	10.0	10.1	9.9	10.7	2.7	2.1	8.6
67.5 and under 72.5 cents	4.7	4.8	4.5	8.3	9.0	5.5	.9	.7	2.2
72.5 and under 77.5 cents	3.2	3.0	4.8	5.8	5.7	6.2	.5	.4	1.8
77.5 and under 82.5 cents	2.2	1.9	4.5	4.2	3.8	5.7	.2	(1)	1.8
82.5 and under 87.5 cents	1.9	1.6	3.8	3.5	3.3	4.5	.2		2.2
87.5 and under 92.5 cents	1.7	1.4	3.2	3.0	2.8	3.8	.2	(1)	1.8
92.5 and under 97.5 cents	1.0	.8	2.4	1.9	1.6	3.2	.1		.7
97.5 and under 102.5 cents	.8	.7	1.0	1.4	1.4	1.3	(1)		.4
102.5 and under 107.5 cents	.5	.4	1.0	1.0	.9	1.5			
107.5 and under 112.5 cents	.7	.7	.9	1.3	1.4	1.2	(1)		.4
112.5 and under 117.5 cents	.4	.1	1.9	.7	.2	2.8	(1)	(1)	
117.5 and under 122.5 cents	.1	.1	.3	.2	.1	.5			
122.5 and under 127.5 cents	.4	.2	1.4	.7	.4	1.8	(1)		.4
127.5 cents and over	.6	.3	2.3	1.1	.6	3.0	.1	(1)	.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers	5,986	5,110	876	3,081	2,483	598	2,905	2,627	278
Average hourly earnings	$0.529	$0.510	$0.633	$0.625	$0.610	$0.686	$0.423	$0.413	$0.516

[1] Less than a tenth of 1 percent.

The 2,627 female production workers reported averaged 41.3 cents an hour, while the 278 female nonproduction workers averaged 51.6 cents. Both production and nonproduction workers were strongly concentrated in the wage intervals of less than 52.5 cents.

Miscellaneous Rubber Goods

The miscellaneous rubber goods branch of the "other rubber goods" industry includes the manufacture of rubberized fabrics, rubber cement, gutta-percha, sponge rubber, latex, camel-back, tire-repair materials, etc.[12] According to information secured from the 1939 Census of Manufactures, there were approximately 220 establishments in this miscellaneous classification. They employed 9,108 employees, of whom 656 were clerical workers and 8,452 full- and part-time wage workers.

TABLE 11.—*Percentage Distribution of Workers in Miscellaneous Rubber Goods Branch, by Average Hourly Earnings, Sex, and Class of Work, United States, May 1940*

Average hourly earnings	All workers			Males			Females		
	Total	Production	Nonproduction	Total	Production	Nonproduction	Total	Production	Nonproduction
Under 27.5 cents	0.1	0.1	------	(1)	0.1	------	0.3	0.3	------
27.5 and under 32.5 cents	5.1	6.0	1.4	3.4	4.1	0.3	8.5	9.2	4.2
32.5 and under 37.5 cents	4.8	5.3	2.8	1.8	2.0	1.0	10.6	11.1	7.4
37.5 and under 42.5 cents	9.5	9.7	8.3	7.1	8.0	3.5	14.0	12.8	20.3
42.5 and under 47.5 cents	12.9	13.6	10.1	8.6	9.0	6.9	21.2	21.8	17.8
47.5 and under 52.5 cents	17.4	18.4	13.3	14.0	14.7	10.4	24.3	25.0	20.6
52.5 and under 57.5 cents	11.9	12.7	8.3	10.1	10.5	8.8	15.2	16.7	6.9
57.5 and under 62.5 cents	9.2	8.7	11.3	13.1	12.8	13.6	1.9	1.3	5.7
62.5 and under 67.5 cents	7.5	7.2	8.7	10.8	10.8	10.4	1.2	.7	4.5
67.5 and under 72.5 cents	6.4	6.4	6.4	9.1	9.7	7.1	1.1	.5	4.5
72.5 and under 77.5 cents	6.2	6.0	7.0	9.1	9.2	9.0	.6	.4	2.0
77.5 and under 82.5 cents	3.0	2.6	4.7	4.2	3.9	5.8	.5	.2	2.2
82.5 and under 87.5 cents	1.7	.9	5.2	2.5	1.5	6.6	.2	------	1.5
87.5 and under 92.5 cents	1.3	.9	3.3	2.0	1.4	4.7	------	------	------
92.5 and under 97.5 cents	.8	.6	1.8	1.2	.9	2.3	.1	(1)	.5
97.5 and under 102.5 cents	.7	.4	2.1	1.0	.6	2.8	(1)	------	.2
102.5 and under 107.5 cents	.3	.1	.9	.4	.2	1.3	------	------	------
107.5 cents and over	1.2	.4	4.4	1.6	.6	5.5	.3	(1)	1.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers	7,637	6,225	1,412	4,995	3,987	1,008	2,642	2,238	404
Average hourly earnings	$0.562	$0.543	$0.642	$0.612	$0.590	$0.693	$0.462	$0.455	$0.502

[1] Less than a tenth of 1 percent.

In the questionnaire survey of May 1940, information was received from 79 plants, in the miscellaneous branch of the "other rubber goods" industry, employing 7,637 workers, of whom 4,995 were male and 2,642 female. The average earnings in the industry were 56.2 cents, males earning 61.2 cents and females 46.2 cents. Male production workers, numbering 3,987, averaged 59 cents an hour. There

[12] 11 plants, which the Census of Manufactures was unable to classify in any branch of the "other rubber goods" industry, have been excluded from this discussion.

were 1,008 nonproduction male workers reported, earning, on the average, 69.3 cents an hour. Almost 7 percent of the male nonproduction workers earned in excess of $1.025 an hour, whereas less than 1 percent of the male production workers earned such wages.

The average hourly earnings of female production workers were 45.5 cents an hour, 2,238 such workers being reported. The average hourly earnings of the 404 female nonproduction workers were 50.2 cents. The overwhelming majority (87.4 percent) of the female production employees was concentrated in the wage class of 32.5 cents and under 57.5 cents. Although this range included almost three-fourths of the female nonproduction workers, some 20 percent of such workers earned in excess of 62.5 cents an hour.

EARNINGS IN SEAMLESS-HOSIERY INDUSTRY UNDER 32.5-CENT MINIMUM WAGE [1]

Summary

THE seamless-hosiery industry paid an average wage of 41.2 cents an hour in September 1940. The general level of wages was highest in the Middle West and in the vicinity of High Point, N. C., where the average hourly earnings were approximately 45 cents. The lowest wage level in the industry was found in the Southern States outside of the High Point, N. C., area, where wages generally were below the average for the industry.

The average wage of 41.2 cents an hour as of September 1940, represents an increase of approximately 17 percent over the average hourly earnings of 35.1 cents which prevailed in September 1938, just previous to the application of the Fair Labor Standards Act. Only a 10-percent increase in the industry wage of September 1938 was necessary to bring the earnings of all workers up to the 32.5-cent minimum which subsequently became effective. The additional payroll increase is traceable in part to a partial maintenance of occupational differentials. More than three-fifths of the workers in the industry were still earning in September 1940 less than 40 cents an hour, the ultimate minimum wage under the act, which will become effective in October 1945.

Scope and Method of Survey

A survey of the seamless-hosiery industry was made by the Bureau of Labor Statistics in the fall of 1940, for the purpose of examining

[1] Prepared by Frances Jones, assisted by George E. Votava of the Bureau's Division of Wage and Hour Statistics. This article summarizes data which, together with additional data not covered herein, will be published in more detail in a separate bulletin.

the industry's wage structure after 2 years of operation under general minimum-wage rates. Seamless-hosiery mills had operated under the statutory minimum wage of 25.0 cents an hour between October 24, 1938, and September 18, 1939. On the latter date a minimum wage of 32.5 cents an hour, recommended by an industry committee and approved by the Administrator, was applied. This was the minimum in effect at the time of the Bureau's survey.

In determining the scope of the survey, the Bureau followed the definition contained in the Administrator's Wage Order of August 18, 1939, which limited the seamless-hosiery industry to "The manufacturing or processing of seamless hosiery, including among other processes the knitting, dyeing, clocking, and all phases of finishing seamless hosiery, but not including the manufacturing or processing of yarn or thread."

The study covered 30,410 [2] workers or approximately one-half of the industry's wage earners. Somewhat more than half of the sizeable establishments in the industry were included, but mills employing fewer than 10 wage earners were generally excluded. Many of the larger mills were covered only to the extent of one-half their total employment; out of a total of 237 mills surveyed, 40 were covered only partially. In all such cases, the sample of workers from the individual mill was carefully selected to include a balanced representation of all occupations. This mill-sampling procedure among the larger establishments was adopted as a means of including a considerable number of these larger mills without permitting them to influence the total picture unduly. The sample of mills was selected in such a way as to give adequate consideration to type of product, geographical location, size of community, size of company, extent of union affiliation, and other significant industry characteristics.

The last previous field survey of wages in the industry was made by the Bureau of Labor Statistics in September 1938. Although the coverage of the 1940 survey was somewhat broader than that on which the 1938 study was based, it included the mills in the 1938 sample, and special tabulations permit a direct comparison of 1938 and 1940 data for identical mills.

The data on which this study is based were obtained by field agents directly from plant records. The information obtained consisted of the occupation, sex, color, and method of wage payment of each wage earner, and his actual hours of work and actual earnings for a representative one-week pay-roll period, with the earnings at regular rates

[2] This figure does not include office workers, nor wage earners engaged in the manufacture of surgical hosiery. Data for those workers are contained in the mimeographed report "Earnings in the Seamless-Hosiery Industry, 1940," issued under date of April 1, 1941. They will also be published in more detail in a bulletin yet to be released.

of pay and the extra earnings from punitive overtime rates [3] reported separately. The hours used refer in all cases to actual working time exclusive of lunch time but inclusive of rest periods. When rest periods were not considered as hours worked, in company accounting, the hours reported by the company were adjusted to include such time.

Data on which to base product classifications were also obtained, together with information concerning the number and general type of knitting machines in operation both during the period studied and during a comparable period before the application of the 25-cent minimum.[4] All plant occupations were covered, including both direct and indirect workers in the production, shipping, maintenance, and service departments; also working supervisors, factory clerks, and office employees who were covered by the wage order for the seamless-hosiery industry.

The pay rolls used were selected for representative periods in the early fall of 1940. All pay-roll periods studied were prior to the change of the maximum basic workweek from 42 to 40 hours, which occurred on October 24, 1940. The month of September, which included most of the pay-roll periods covered, is neither a peak period nor a period of low activity, and hourly earnings for this month are believed to be fairly representative of normal conditions.

Characteristics of the Industry and Sample

The seamless-hosiery industry, according to a preliminary report of the Census of Manufactures, provided employment in 1939 for an average labor force of 61,852 wage earners in 433 establishments. It produced hosiery valued at $139,000,000 and paid an annual wage bill of $42,000,000,[5] which was 30 percent of the value of product and 58 percent of the value added by manufacture.

The industry produces more than two-thirds of all hosiery manufactured in this country. It produces practically all of the hosiery used by men and children, and approximately one-fourth of all women's hosiery. Men's hosiery represents a little more than half of the units produced, children's and infants' goods almost a third, and women's hosiery approximately one-sixth.[6]

[3] The Fair Labor Standards Act provides that employees working in excess of specified hours per week (42 at the time of the survey) shall receive time and a half for overtime.

[4] A discussion of wage rates paid in the manufacture of various types of products is contained in the mimeographed report, "Earnings in the Seamless-Hosiery Industry, 1940," issued April 1, 1941. That report also contains information on number and type of knitting machines in operation in the industry for each of the years 1938 and 1940.

[5] Including the wages of salaried personnel, the wage bill was $48,000,000.

[6] Census of Manufactures, 1937; Knit goods.

REGIONAL DISTRIBUTION

The most important producing States are North Carolina, Tennessee, Georgia, and Pennsylvania. Mills are also fairly numerous in Virginia, Illinois, Wisconsin, and Alabama, and a few mills are located in other States. A distribution by region of the mills and workers included in this study is shown in table 1. Three-fourths of the workers in the sample were from Southern States, 11 percent were from Pennsylvania, 8.5 percent were from the Middle West, and 4.5 percent were from the North Atlantic States. North Carolina alone accounted for 37.6 percent of the workers, almost 20 percent being located in the five North Carolina counties of Alamance, Forsyth, Guilford, Davidson, and Randolph; in this area (hereafter referred to as the Triangle area) High Point is the principal hosiery center. Most of the remaining North Carolina mills were in numerous small towns throughout the western part of the State. Tennessee, second in importance, had scarcely more than a third as many workers as North Carolina, and only approximately 15 percent of the number in the entire industry.

TABLE 1.—*Regional Distribution of Mills and Workers included in Survey of Seamless-Hosiery Industry*

Region	Mills		Workers					
			Total		Males		Females	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All regions	237	100.0	30,410	100.0	9,944	100.0	20,466	100.0
North	78	32.9	7,417	24.4	1,998	20.1	5,419	26.5
Pennsylvania, Delaware, and southern New Jersey	44	18.5	3,475	11.4	949	9.5	2,526	12.4
Philadelphia	5	2.1	650	2.1	158	1.6	492	2.4
Reading	9	3.8	554	1.8	143	1.4	411	2.0
Remainder of area	30	12.6	2,271	7.5	648	6.5	1,623	8.0
North Atlantic [1]	16	6.8	1,356	4.5	374	3.8	982	4.8
Midwest [2]	18	7.6	2,586	8.5	675	6.8	1,911	9.3
Rockford, Ill.	4	1.7	407	1.3	154	1.5	253	1.2
Remainder of area	14	5.9	2,179	7.2	521	5.3	1,658	8.1
South	159	67.1	22,993	75.6	7,946	79.9	15,047	73.5
North Carolina	91	38.4	11,438	37.6	4,235	42.6	7,203	35.2
Triangle area [3]	36	15.2	5,947	19.5	2,430	24.4	3,517	17.2
Burlington	11	4.6	861	2.8	334	3.4	527	2.6
High Point	8	3.4	1,981	6.5	835	8.4	1,146	5.6
Remainder of area	17	7.2	3,105	10.2	1,261	12.6	1,844	9.0
Western North Carolina [4]	45	19.0	4,584	15.1	1,517	15.3	3,067	15.0
Hickory	14	5.9	1,109	3.6	380	3.8	729	3.6
Remainder of area	31	13.1	3,475	11.5	1,137	11.5	2,338	11.4
Remainder of State	10	4.2	907	3.0	288	2.9	619	3.0
Other South	68	28.7	11,555	38.0	3,711	37.3	7,844	38.3
Georgia	17	7.2	2,873	9.4	1,002	10.1	1,871	9.1
Tennessee	27	11.4	4,184	13.8	1,305	13.1	2,879	14.1
Virginia	8	3.4	1,433	4.7	431	4.3	1,002	4.9
Border States [5]	6	2.5	1,649	5.4	539	5.4	1,110	5.4
Remainder of area [6]	10	4.2	1,416	4.7	434	4.4	982	4.8

[1] Connecticut, Massachusetts, New Hampshire, New York, and Vermont.
[2] Illinois, Indiana, Michigan, Ohio, and Wisconsin.
[3] Alamance, Guilford, Forsyth, Davidson, and Randolph counties.
[4] Counties west of Stokes, Forsyth, Davidson, Stanly, and Anson.
[5] Kentucky, Maryland, and West Virginia.
[6] Alabama, Louisiana, Mississippi, and South Carolina.

The industry is largely localized in small towns. Nearly a tenth of the workers in the sample were from villages with a population of less than 1,000, a third from towns of less than 5,000, and two-thirds from towns smaller than 25,000. The distribution in rural areas was especially marked in the South, where 71.3 percent of the workers covered were from towns with less than 25,000 population. The corresponding figure for the North was 46.3 percent.

It should be noted that several of these small towns were within more densely populated areas than their individual populations would indicate, some being within the labor-market area of cities. However, when the sample is classified according to the size of the labor market, 58.7 percent of the total coverage falls in communities with a population of less than 25,000.

LABOR ORGANIZATION

Very few collective-bargaining agreements between workers and employers exist in the industry. Because the few union mills were large and scattered geographically, the survey covered nearly all of the union establishments but only one-half of their workers. Workers under union agreements comprised 10.6 percent of the total coverage, and represented 20.2 percent of all workers in the North, but only 7.5 percent of all those in the South.

OCCUPATIONAL STRUCTURE AND THE LABOR FORCE

About 82 percent of the workers in the seamless-hosiery industry may be classified as semiskilled, 9 percent as skilled, 7 percent as unskilled, and 2 percent as subminimum learners. Woman workers are in the majority, composing 67.3 percent of the total. Northern factories employ 73.1 percent female labor, as compared with 65.4 percent in the South.

The manufacturing processes in seamless-hosiery mills may be grouped roughly into three departments—"knitting," "grey goods," and "finishing."

The knitting department employs about 30 percent of the total labor force. Its major occupations are knitting—the basic manufacturing operation, which employs about 22 percent of all workers—and knitting-machine adjusting or "fixing," the most highly skilled major occupation, employing 6.6 percent of the total labor force. Practically all of the machine fixers are men. Both men and women operate knitting machines, the respective proportions of male and female knitters being 37.3 and 62.7 percent. Male knitters, however, predominate as operators of all types of knitting machines except the

transfer-top machines.[7] In the transfer operation the nimble fingers of young women apparently outweigh in importance the male aptitude for mechanics. Transfer-top knitting-machine operators comprise more than half of all knitters, and over 90 percent of them are females. The operators of knitting machines may be classified high in the semiskilled bracket. However, the responsibility of knitters operating comparable machines varies somewhat among mills; and among machines of various types the operator's responsibility varies considerably. A learning period of 480 hours at subminimum rates is permitted by administrative decision under the Fair Labor Standards Act for operators of all knitting machines except the transfer-top machines; for these a learning period of 960 hours is allowed. Because of the length of training required before an operator achieves proficiency as a transfer-top knitter, that occupation is sometimes considered a skilled occupation.

The grey-goods department employs about 35 percent of the labor force, and includes the loopers,[8] who rank second to knitters in numerical importance and comprise 20 percent of the labor force. The looping operation is necessary to complete all hosiery except the relatively small amount knit on flat-bed machines. Looping entails a skill comparable to that required of the transfer-top knitter, and involves more sustained pressure of work. The learning period for loopers is also fixed at 960 hours. All loopers in the mills studied were females. Inspectors and menders in the grey-goods department (7.3 percent of the labor force) and cutters, clippers, and trimmers (2.8 percent of the labor force) are practically all females. The sewing-machine operations of cuff sewing, welting, and mock seaming employ 2.9 percent of the workers, all female. These sewing occupations are found principally in connection with women's and children's hosiery and anklets. All of the above-named occupations are semiskilled in nature and, except in the case of loopers, a learning period of 480 hours is allowed. Male workers in this department are restricted largely to stock handlers.

The finishing-department workers comprise a little less than one-fourth of the total labor force. Boarding, a semiskilled production operation, is the major finishing occupation, employing 7.9 percent of all workers. About seven-eighths of the boarders are males. Dye-room labor, 1.9 percent of the total, is all male. The dye master is a skilled worker, while semiskilled workers operate the dye, washing, and extractor machines, and the floor labor is unskilled. The finishing

[7] With transfer-top knitting equipment, the top of the stocking is knit on a separate "ribber" machine and transferred by hand to the "transfer-top" machine which completes the knitting operation. The operator of the latter machine hangs the stitches of the ribbed top on the points of a transfer ring by hand and, by means of this transfer ring, transfers the stitches to the needles of the knitting machine.

[8] Loopers operate a machine which closes the opening in the toe of seamless hosiery.

of hosiery after boarding requires about 14 percent of the total labor force. Pairing—semiskilled work and the major finishing occupation after boarding—includes almost 5 percent of all workers, and folding—also semiskilled work—a little less than 3 percent. Other occupations are finish inspecting and mending, labeling, ticketing, and boxing. Practically all of the workers engaged in the finishing of hosiery after the boarding operation are females. Learning periods of 480 hours at subminimum rates are permitted for boarders, pairers, folders, inspectors, and menders.

In addition to the principal production workers described above, the labor force includes miscellaneous auxiliary workers, floormen, shipping and stockroom and maintenance labor, working supervisors, and learners.

METHODS OF WAGE PAYMENT

This is a piece-work industry, three-fourths of all workers covered by the survey being paid on a production basis. Workers in the major manufacturing occupations are almost wholly piece workers. Time rates are the usual method of pay only for indirect labor in the production departments and for the maintenance and service workers. The pay of only 2 percent of the workers studied was affected by bonus systems.

Average Hourly Earnings

THE INDUSTRY AS A WHOLE

The hourly earnings of all workers in the seamless-hosiery mills averaged 41.2 cents [9] in September 1940.

Individual earnings are confined almost entirely within the limits of a 60-cent range, the earnings of 96.6 percent of all workers falling between 32.5 and 92.5 cents an hour. The average earnings of more than three-fourths (78.0 percent) of the workers, however, are within a 15-cent range, between 32.5 and 47.5 cents an hour, and almost half (48.1 percent) are within a 5-cent range between 32.5 and 37.5 cents an hour. The heavy concentration of workers in the lower-wage brackets thus places the median hourly rate (37 cents) 4 cents lower than the average, which is influenced by the relatively high wages of a small group of workers. A percentage distribution by average hourly earnings intervals of 2.5 cents is given in table 2, for all workers, by sex and region. This distribution reveals a marked concentration at

[9] This average differs by only one-tenth of 1 cent from the 1940 average hourly earnings of 41.3 cents for the smaller sample of identical mills from which 1938–40 comparisons are drawn. See page 1530.

The average wage of 41.2 cents an hour is based on earnings at straight time rates, the extra earnings from punitive overtime rates having been excluded. However, the amount of overtime worked during the period studied was not sufficient to change materially the average hourly wage. With the extra pay for overtime work included, the average hourly earnings are increased only by two-tenths of a cent, or from 41.2 cents to 41.4 cents. The average of 43.5 cents for the North is increased to 43.8 cents, and the average of 40.4 cents for the South to 40.6 cents.

exactly the minimum wage (32.5 cents). One-fifth (20.8 percent) of all workers earned only the minimum wage, and more than a third (34.2 percent) earned between 32.5 and 35.0 cents.

TABLE 2.—*Percentage Distribution of Seamless-Hosiery Workers, 1940, by Average Hourly Earnings, Region, and Sex*

Average hourly earnings	All regions			North			South		
	All workers	Males	Females	All workers	Males	Females	All workers	Males	Females
Under 30.0 cents	1.9	1.3	2.2	2.2	0.9	2.7	1.8	1.4	2.0
30.0 and under 32.5 cents	1.0	.8	1.2	.7	.4	.8	1.2	.9	1.3
Exactly 32.5 cents	20.8	17.8	22.2	15.6	7.9	18.6	22.4	20.3	23.5
32.6 and under 35.0 cents	13.4	6.5	16.7	8.3	1.7	10.7	15.0	7.7	18.9
35.0 and under 37.5 cents	13.9	9.6	16.1	14.6	7.4	17.2	13.7	10.1	15.7
37.5 and under 40.0 cents	10.1	6.8	11.7	10.1	5.0	12.1	10.1	7.3	11.6
40.0 and under 42.5 cents	8.6	8.1	8.9	8.8	7.0	9.6	8.4	8.3	8.6
42.5 and under 45.0 cents	6.0	5.3	6.3	7.4	5.0	8.2	5.5	5.3	5.6
45.0 and under 47.5 cents	5.2	6.0	4.8	7.2	7.9	6.9	4.6	5.5	4.0
47.5 and under 50.0 cents	3.5	4.2	3.2	4.5	5.6	4.1	3.2	3.8	2.9
50.0 and under 52.5 cents	3.6	6.0	2.4	4.6	7.6	3.4	3.3	5.6	2.1
52.5 and under 57.5 cents	4.2	7.6	2.5	4.7	8.5	3.3	4.0	7.4	2.2
57.5 and under 62.5 cents	2.2	4.6	1.1	3.1	7.4	1.4	1.9	3.9	.9
62.5 and under 67.5 cents	1.7	4.4	.4	2.2	6.4	.6	1.6	3.9	.4
67.5 and under 72.5 cents	1.2	3.1	.2	2.1	7.0	.3	.9	2.1	.2
72.5 and under 77.5 cents	.9	2.5	.1	1.3	4.6	.1	.7	1.9	.1
77.5 and under 82.5 cents	.5	1.5	(1)	.7	2.5	(1)	.5	1.3	(1)
82.5 and under 87.5 cents	.4	1.1	(1)	.7	2.5	-------	.3	.8	(1)
87.5 and under 92.5 cents	.4	1.3	(1)	.4	1.6	(1)	.4	1.2	(1)
92.5 and under 97.5 cents	.2	.7	-------	.4	1.5	-------	.2	.5	-------
97.5 and under 102.5 cents	.1	.4	-------	.2	.7	-------	.1	.4	-------
102.5 and under 112.5 cents	.1	.2	-------	.1	.5	-------	.1	.2	-------
112.5 cents and over	.1	.2	(1)	.1	.4	-------	.1	.2	(1)
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers	30,410	9,944	20,466	7,417	1,998	5,419	22,993	7,946	15,047
Average hourly earnings	$0.412	$0.472	$0.380	$0.435	$0.536	$0.392	$0.404	$0.454	$0.375

[1] Less than a tenth of 1 percent.

Average hourly wages lower than 32.5 cents were received by 2.9 percent of the workers, representing certificated subminimum workers (2.1 percent) and apparent violations of the minimum wage (in an additional 0.8 percent).[10]

VARIATIONS AMONG MILLS

Much of the limited variation in individual average hourly earnings can be attributed to differences in wage levels among mills rather than to occupational and skill wage differences within establishments. There was a spread of 76.7 percent between the average earnings in the

[10] Some of the workers represented as earning less than 32.5 cents an hour were employed in two mills that did not reckon formal rest periods as a part of the working week. These workers were being paid the legal minimum for time worked as computed by their employers.

lowest-wage and the highest-wage mills.[11] The lowest average wage found in any finished-goods mill [12] covered in the survey was 32.6 cents; the highest, 57.6 cents an hour. Approximately 8 percent of the mills had a wage level between 32.5 and 35.0 cents, and 3 percent paid wages which averaged 50 cents or more. A distribution of mills by plant average hourly earnings is presented in table 3.

TABLE 3.—*Distribution of Mills and Workers in Seamless-Hosiery Industry, 1940, by Groups of Mills With Specified Wage Levels and by Region*

Plant average hourly earnings	All regions			North			South		
	Mills		Workers employed (percent)	Mills		Workers employed (percent)	Mills		Workers employed (percent)
	Number	Percent		Number	Percent		Number	Percent	
32.5 and under 35.0 cents	19	8.0	5.7	3	3.8	0.8	16	10.1	7.3
35.0 and under 37.5 cents	49	20.7	14.8	7	9.0	3.7	42	26.4	18.4
37.5 and under 40.0 cents	62	26.1	23.7	18	23.1	16.6	44	27.6	25.9
40.0 and under 42.5 cents	39	16.5	19.1	15	19.2	19.8	24	15.1	18.9
42.5 and under 45.0 cents	36	15.2	17.8	20	25.7	31.3	16	10.1	13.4
45.0 and under 47.5 cents	14	5.9	6.2	6	7.7	8.1	8	5.0	5.6
47.5 and under 50.0 cents	11	4.6	8.6	5	6.4	12.1	6	3.8	7.5
50.0 cents and over	7	3.0	4.1	4	5.1	7.6	3	1.9	3.0
Total	237	100.0	100.0	78	100.0	100.0	159	100.0	100.0

The dispersion of plant-average wages is even more pronounced than might be expected in view of the concentration of workers in the low-wage brackets. The reason will be found in table 4 which correlates individual average hourly earnings and plant-average wages. It will be observed that only slight variation in earnings exists among workers in low-wage mills, the average wage of a preponderance of the labor force in such mills being very close to the average for the mill, whereas, in the higher-wage mills, occupational and skill differences are much more pronounced, with a resultant wider dispersion of workers around the average wage for the mill.

[11] Since wage levels in the large mills tend to be higher than those in small mills, the overrepresentation of large mills previously mentioned (p. 1515) has the effect of exaggerating slightly the number of mills with high-wage levels. The distribution by plant average hourly earnings of the 40 mills which were sampled only partially is as follows:

Region	32.5–35.0 cents	35.0–37.5 cents	37.5–40.0 cents	40.0–42.5 cents	42.5–45.0 cents	45.0–47.5 cents	47.5–50.0 cents	50.0 cents and over
All regions	1	4	6	8	7	5	6	3
North			2	1	5	2	4	2
South	1	4	4	7	2	3	2	1

[12] The survey included grey-goods mills and finishing plants, as well as finished-goods mills.

TABLE 4.—*Percentage Distribution of Seamless-Hosiery Workers, 1940, by Average Hourly Earnings and by Groups of Mills With Specified Wage Levels*

Average hourly earnings of individual workers	Workers in mills paying average hourly wages in 1940 of—							
	32.5 and under 35.0 cents	35.0 and under 37.5 cents	37.5 and under 40.0 cents	40.0 and under 42.5 cents	42.5 and under 45.0 cents	45.0 and under 47.5 cents	47.5 and under 50.0 cents	50.0 cents and over
Under 30.0 cents	2.4	2.0	2.2	1.9	2.4	0.8	1.0	0.4
30.0 and under 32.5 cents	.9	1.9	1.6	.9	.8	.1	.2	.1
Exactly 32.5 cents	58.8	36.7	22.8	17.8	11.9	10.8	3.3	2.5
32.6 and under 35.0 cents	18.0	20.5	17.1	13.9	9.9	6.9	4.0	2.8
35.0 and under 37.5 cents	9.2	15.1	18.4	15.2	13.4	8.6	8.6	5.5
37.5 and under 40.0 cents	3.5	7.4	11.7	13.0	11.3	8.7	8.7	6.4
40.0 and under 42.5 cents	2.7	5.8	8.0	10.0	10.1	10.0	10.9	9.4
42.5 and under 45.0 cents	.8	2.6	4.7	6.8	8.1	7.1	9.9	8.9
45.0 and under 47.5 cents	1.1	1.9	3.5	4.9	7.6	9.2	9.2	9.0
47.5 and under 50.0 cents	.5	1.0	2.1	3.2	4.8	6.5	7.8	7.4
50.0 and under 52.5 cents	.7	1.4	1.8	2.8	4.9	7.1	7.8	10.0
52.5 and under 57.5 cents	1.0	1.1	1.8	2.8	5.2	8.8	11.2	13.3
57.5 and under 62.5 cents	.1	.9	1.0	1.5	2.7	4.9	5.4	7.4
62.5 and under 67.5 cents	.2	.8	1.0	1.9	1.8	3.9	3.5	3.6
67.5 and under 72.5 cents	-------	.3	.7	1.3	1.4	2.2	2.1	3.5
72.5 and under 77.5 cents	-------	.3	.6	.8	1.4	1.4	1.4	1.9
77.5 and under 82.5 cents	-------	.1	.4	.5	.6	.6	1.2	1.8
82.5 and under 87.5 cents	.1	.1	.1	.3	.4	.5	1.1	1.7
87.5 and under 92.5 cents	-------	(1)	.2	.3	.6	1.0	1.3	1.6
92.5 and under 97.5 cents	-------	.1	.1	(1)	.3	.5	.6	1.8
97.5 and under 102.5 cents	-------	(1)	.2	.1	.1	.1	.5	.4
102.5 and under 112.5 cents	-------	(1)	(1)	(1)	.2	.1	.2	.2
112.5 cents and over	-------	-------	(1)	.1	.1	.2	.1	.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers	1,741	4,504	7,182	5,817	5,408	1,880	2,627	1,251
Number of mills	19	49	62	39	36	14	11	7
Average hourly earnings	$0.342	$0.364	$0.386	$0.407	$0.433	$0.464	$0.487	$0.525

[1] Less than a tenth of 1 percent.

The relative restriction of occupational and skill differences in low-wage establishments is to be expected. That such differences as naturally exist were narrowed by the application of a minimum wage which affected the earnings of a substantial number of workers is demonstrated in a later section.

REGIONAL DIFFERENCES

Several variables operate to produce the different wage levels among mills. An examination of the data indicates that the most significant of these variables is the location of establishments. There are general regional differences and, apparently, differences also based on size of community or labor market within a region.

Wages paid by mills located in the Northern States are higher, in general, than those paid by southern mills. Average wages in the North were 43.5 cents, as compared with a southern average wage of 40.4 cents an hour (table 5). The median wage in the North was about 39 cents. Approximately 16 percent of the northern workers earned exactly the minimum wage, slightly more than a fourth earned less than 35 cents, and 51.5 percent received less than 40 cents. The median southern wage was about 36 cents. Almost a fourth of the

southern workers earned exactly the minimum, two-fifths earned less than 35 cents, and about two-thirds were paid less than 40 cents.

The broad classifications of "North" and "South," however, tend to obscure other important regional differences.

TABLE 5.—*Average Hourly Earnings of Seamless-Hosiery Workers, 1940, and Distribution of Mills by Region and by Specified Wage Levels*

Region	Average hourly earnings	Number of mills paying average hourly wages in 1940 of—							
		32.5 and under 35.0 cents	35.0 and under 37.5 cents	37.5 and under 40.0 cents	40.0 and under 42.5 cents	42.5 and under 45.0 cents	45.0 and under 47.5 cents	47.5 and under 50.0 cents	50.0 cents and over
All regions	$0.412	19	49	62	39	36	14	11	7
North	.435	3	7	18	15	20	6	5	4
Pennsylvania and adjacent area	.422	1	4	12	8	12	5	2	
Philadelphia	.433			1	1	2	1		
Reading	.428		1	3	1	2	1	1	
Remainder of area	.418	1	3	8	6	8	3	1	
North Atlantic	.420	2	3	3	3	3		1	1
Midwest	.458			3	4	5	1	2	3
Rockford, Ill.[1]	.478								
Remainder of area [1]	.454								
South	.404	16	42	44	24	16	8	6	3
North Carolina	.423	1	20	26	17	13	7	5	2
Triangle area	.450		2	5	8	7	7	5	2
Burlington	.439			3	2	1	3	1	1
High Point	.457					3	3	1	1
Remainder of area	.449		2	2	6	3	1	3	
Western North Carolina	.397	1	14	17	7	6			
Hickory	.397		3	6	2	3			
Remainder of area	.397	1	11	11	5	3			
Remainder of State	.381		4	4	2				
Other South	.385	15	24	18	7	3	1	1	1
Georgia	.377	4	6	4	2			1	
Tennessee	.389	8	7	5	3	2	1		1
Virginia	.392	1	1	4	2				
Border States	.400		3	2		1			
Remainder of area	.366	2	5	3					
Number of workers, all regions	30,410	1,741	4,504	7,182	5,817	5,408	1,880	2,627	1,251
Number of workers, North	7,417	56	278	1,228	1,470	2,322	601	897	565
Number of workers, South	22,993	1,685	4,226	5,954	4,347	3,086	1,279	1,730	686

[1] The distribution of mill averages is omitted to prevent identification of plant-average data for Rockford, Ill. A partial coverage of all Rockford mills was included in the survey.

North Carolina is the largest seamless-hosiery producing State in the country, and North Carolina's most important hosiery center pays wages that are among the highest in the industry. The average earnings in High Point (45.7 cents) are exceeded in the industry only by earnings in Rockford, Ill. (47.8 cents), a much smaller center. Mills in Burlington, N. C., pay wages (43.9 cents) more than equal to the average Philadelphia wage (43.3 cents). Average earnings in North Carolina as a whole (42.3 cents) exceed slightly the averages for both Pennsylvania (42.2 cents) and the North Atlantic States (42.0 cents).

North Carolina appears to include two wage plateaus. The Triangle area surrounding High Point, containing approximately half of the State's hosiery workers, has an average hourly wage which is more than 5 cents higher than the prevailing wage in the remainder of the

State. Although there are differences among mills within the Triangle area, the spread is not extreme, and the survey disclosed no extremely low-wage mills. North Carolina wages outside of the Triangle area are approximately at the same level as earnings in other Southern States.

Omitting the State of North Carolina, the wage structure of the remaining Southern States is fairly uniform, with more than 90 percent of the mills paying average hourly wages within a 10-cent radius. The lowest-wage level in this area was in the southernmost States of Alabama, Georgia, Louisiana, Mississippi, and South Carolina, where only one relatively high-wage mill was found. The average wage in Georgia was 37.7 cents, and in the other 4 States combined, 36.6 cents. Average wages in Virginia, Tennessee, and the border States were from 1 to 2 cents higher than the Georgia average; this was due to the influence of a few relatively high-wage mills, however, rather than to a higher general scale of pay. Average earnings for the southern region exclusive of North Carolina were 38.5 cents. Only 6 of a total of 68 southern mills located outside of North Carolina paid wages equal to the industry average.[13]

It will be observed from table 5 that mills in the northern region showed the same range of wages as the southern mills, but had a greater concentration in the middle- and higher-wage brackets. The Middle Western States, with the highest average of the entire northern region, had no extremely low-wage mills. As previously stated, Rockford, Ill., had a small group of mills in which average earnings were higher than the average for any other seamless-hosiery center. Philadelphia had no extremely low-wage mills, but approximately half of the establishments in Pennsylvania (exclusive of Philadelphia), and in the North Atlantic area as well, had mill-average wages below the average for the industry.

INFLUENCE OF SIZE OF COMMUNITY [14]

The concentration of the industry in small towns undoubtedly contributes to the low level of wages which prevails generally. This condition is accentuated in the lower-wage areas of the South where a substantial proportion of the mills are scattered among small towns in which the economic pattern is more rural than urban in character, job opportunities are scarce, and the percentage of workers organized for bargaining is very low.

It is significant that only 29 percent of the workers in the North were in communities smaller than 25,000 population, as compared with

[13] Each of the 7 mills in the 40.0 to 42.5 cents class interval in table 5 had a mill-average wage lower than 41.0 cents.

[14] In assembling comparative data by size of community, the "community" unit has been extended to include an entire metropolitan or labor-market area and is not confined merely to the limits of an incorporated town or city.

68 percent in the South. In the high-wage Middle West, less than 15 percent of the workers were found in communities smaller than 25,000 population, as compared with 27 percent in Pennsylvania, and 64 percent in the North Atlantic area. A large part of the high-wage Triangle area in North Carolina is urban in character, whereas 97 percent of the workers in the remainder of the State, where lower wages prevail, were in communities of less than 25,000 population.

Table 6 shows average hourly earnings by size of community for the North, the South, and the country as a whole.

TABLE 6.—*Average Hourly Earnings of Seamless-Hosiery Workers, 1940, by Size of Community and Region*

Size of community [1] (population)	All regions		North		South	
	Average hourly earnings	Percent of average earnings in smallest community class	Average hourly earnings	Percent of average earnings in smallest community class	Average hourly earnings	Percent of average earnings in smallest community class
All sizes	$0.412	106.2	$0.435	107.7	$0.404	104.7
Under 5,000	.388	100.0	.404	100.0	.386	100.0
5,000 and under 10,000	.392	101.0	.416	103.0	.389	100.8
10,000 and under 25,000	.412	106.2	.426	105.4	.409	106.0
25,000 and under 100,000	.431	111.1	.441	109.2	.429	111.1
100,000 and under 500,000	.420	108.2	.433	107.2	.408	105.7
500,000 and over	.449	115.7	.449	111.1	----	----

[1] Community size is not to be confused with corporate size of town. As used here, the term refers to the metropolitan district or labor-market area, within which there is competition among workers for jobs as well as among employers for workers. The U. S. Bureau of the Census metropolitan districts were utilized for communities of 100,000 population or more which embraced a town of at least 50,000 corporate population. Similar labor-market areas were established for smaller communities.

Table 7 gives distribution of mill-average wages in the various wage areas, by size of community. Examination of the table shows that the lower-wage mills are by no means restricted to the small communities, nor the higher-wage mills to the larger communities, but their respective concentrations are sufficiently marked to effect a definite size-of-community difference.

TABLE 7.—*Distribution of Seamless-Hosiery Mills, by Specified Wage Levels, 1940, by Region and by Size of Community*

Region and size of community [1] (population)	Total number of—		Number of mills paying average hourly wages in 1940 of—							
	Mills	Workers	32.5 and under 35.0 cents	35.0 and under 37.5 cents	37.5 and under 40.0 cents	40.0 and under 42.5 cents	42.5 and under 45.0 cents	45.0 and under 47.5 cents	47.5 and under 50.0 cents	50.0 cents and over
All regions, total	237	30,410	19	49	62	39	36	14	11	7
Under 25,000	150	17,922	16	37	41	26	17	7	5	1
25,000 and under 100,000	32	6,096	2	5	9	4	5	3	3	1
100,000 and over	55	6,392	1	7	12	9	14	4	3	5
Pennsylvania and adjacent area, total	44	3,475	1	4	12	8	12	5	2	------
Under 25,000	13	923	1	1	4	3	2	2	------	------
25,000 and under 100,000	3	345	------	------	1	1	1	------	------	------
100,000 and over	28	2,207	------	3	7	4	9	3	2	------
North Atlantic, total	16	1,356	2	3	3	3	3	------	1	1
Under 25,000	10	872	2	1	3	1	2	------	1	------
25,000 and under 100,000	------	------	------	------	------	------	------	------	------	------
100,000 and over	6	484	------	2	------	2	1	------	------	1
Midwest, total	18	2,586	------	------	3	4	5	1	2	3
Under 25,000	4	367	------	------	1	1	2	------	------	------
25,000 and under 100,000	5	881	------	------	1	2	1	------	1	------
100,000 and over	9	1,338	------	------	1	1	2	1	1	3
Triangle area, North Carolina, total	36	5,947	------	2	5	8	7	7	5	2
Under 25,000	26	3,033	------	1	5	8	4	4	3	1
25,000 and under 100,000	10	2,914	------	1	------	------	3	3	2	1
100,000 and over	------	------	------	------	------	------	------	------	------	------
Remainder of North Carolina, total	55	5,491	1	18	21	9	6	------	------	------
Under 25,000	52	5,313	1	17	20	8	6	------	------	------
25,000 and under 100,000	3	178	------	1	1	1	------	------	------	------
100,000 and over	------	------	------	------	------	------	------	------	------	------
Tennessee, total	27	4,184	8	7	5	3	2	1	------	1
Under 25,000	18	2,368	6	7	2	2	------	1	------	------
25,000 and under 100,000	1	(2)	1	------	------	------	------	------	------	------
100,000 and over	8	1,816	1	------	3	1	2	------	------	1
Remainder of South, total	41	7,371	7	15	13	4	1	------	1	------
Under 25,000	27	5,046	6	10	6	3	1	------	1	------
25,000 and under 100,000	10	1,778	1	3	6	------	------	------	------	------
100,000 and over	4	547	------	2	1	1	------	------	------	------

[1] For a definition of "Community," see footnote 1, table 6.
[2] Employment data are included in the "under 25,000" class to avoid disclosure of mill identity.

PRICE OF PRODUCT AND AVERAGE HOURLY EARNINGS

There is a noticeable tendency towards the payment of lower wages in the manufacture of cheap hosiery than are generally paid in the production of higher-priced goods. This fact is demonstrated in table 8, which classifies each mill according to the dominant retail price[15] of its product and distributes the mills by plant-average wage classes. The average hourly earnings of mills in each retail-price class also are shown in table 8. There is a difference of approximately 3 cents in average wages between the group of mills which specialize in hosiery that retails for less than 25 cents, and those mills which produce principally high-priced goods.

[15] It should be noted that most of the mills produce in more than one price bracket. However, as a rule, a substantial majority of the product of such mills is typically in one price bracket.

TABLE 8.—*Average Hourly Earnings of Seamless-Hosiery Workers, 1940, and Distribution of Mills by Dominant Retail Price of Mill Product and Specified Wage Levels*

Dominant retail-price class of mill product	Total number of—		Average hourly earnings	Number of mills paying average hourly wages in 1940 of—							
	Mills	Workers		32.5 and under 35.0 cents	35.0 and under 37.5 cents	37.5 and under 40.0 cents	40.0 and under 42.5 cents	42.5 and under 45.0 cents	45.0 and under 47.5 cents	47.5 and under 50.0 cents	50.0 cents and over
All retail-price classes	237	30,410	$0.412	19	49	62	39	36	14	11	7
10 cents and under	45	5,813	.398	4	17	12	4	3	5	------	------
Over 10 and under 16 cents	70	8,396	.401	7	20	24	9	5	------	4	1
16 and under 25 cents	27	3,040	.403	2	4	9	6	3	1	1	1
25 and under 35 cents	50	7,587	.429	3	4	7	12	12	6	4	2
35 and under 50 cents	30	3,467	.428	3	4	5	5	9	2	------	2
50 cents and over	13	1,818	.419	------	------	5	2	3	------	2	1
Unknown	2	289	(1)	------	------	------	1	1	------	------	------

[1] Average was not computed.

The average wages paid by the several retail-price classes of mills are not as revealing of individual plant policy as may be found in an analysis of the distribution of mills. Although mills manufacturing in practically all price brackets are found at all wage levels there is, nevertheless, a concentration of low-wage mills in the lower retail-price classes, which is evident when the distribution is summarized as in table 9.

TABLE 9.—*Percentage Distribution of Seamless-Hosiery Mills by Price Class of Produc*

Price class of product	Percent of mills paying average hourly wages of—		
	Under 40 cents	40.0 to 47.5 cents	47.5 cents and over
10 cents and under	73.3	26.7	------
Over 10 and under 16 cents	72.9	20.0	7.1
16 and under 25 cents	55.6	37.0	7.4
25 and under 35 cents	28.0	60.0	12.0
35 and under 50 cents	40.0	53.3	6.7
50 cents and over	38.5	38.5	23.0

The preponderance of low-wage mills among the producers of low-priced goods, which is observed when the industry is examined as a whole, is also evident when the data for wage areas are segregated. Table 10 differentiates average hourly earnings both by price of product and by region. It will be observed that even within a given wage area, except in the Midwest region, average earnings in the highest retail-price class of product are consistently higher than earnings in the lower-price brackets.

TABLE 10.—*Average Hourly Earnings of Seamless-Hosiery Workers, 1940, by Region and by Dominant Price Class of Product*

Region	All products	Dominant retail-price class of mill product			
		10 cents and under	Over 10 and under 16 cents	16 and under 25 cents	25 cents and over
All regions	$0.412	$0.398	$0.401	$0.403	$0.427
Pennsylvania and adjacent area	.422	.420	.391	.413	.432
North Atlantic	.420			.400	.426
Midwest	.458		.455	.495	.457
North Carolina	.423	.426	.404	.400	.435
Triangle area	.450	.449	.451	.425	.455
Remainder of State	.394	.388	.383	.386	.407
Other South	.385	.365	.386	.374	.400
Border States, including Virginia	.396	.375	.377	(1)	.408
Remainder of area	.381	.364	.388	.375	.391

[1] Average not computed for less than 3 mills.

Changes in Wage Structure Under Fair Labor Standards Act

The foregoing discussion has dealt only with the complete sample of 237 mills. The sample included, however, 91 out of 97 establishments which had been covered in a previous survey of the seamless-hosiery industry.[16] With a few exceptions, the previous survey covered data for September 1938, thus providing information concerning the wage structure of the industry before the first minimum wage of 25 cents an hour became effective under the Fair Labor Standards Act. Separate tabulations of the data from the present survey for the 91 identical mills were compiled to permit a study of the changed wage patterns under the act, as disclosed by strictly comparable data for the two periods.[17]

COMPARISON OF WAGE LEVELS IN SEPTEMBER 1938 AND SEPTEMBER 1940

Average wages in the identical mills [18] advanced from 35.1 cents to 41.3 cents [19] during 2 years of operation under a general minimum wage. This represents an increase of 17.7 percent, which may be compared with an estimated pay-roll increase of 10.1 percent that was necessary to bring the wages of all workers up to the 32.5-cent minimum.

[16] See Monthly Labor Review, June 1939: Earnings and Hours in the Manufacture of Seamless Hosiery, 1938.

[17] The exclusion from the 1940 study of the 6 mills of the 1938 survey which were out of business does not impair the comparable nature of the 1940 data. Although comprising 6.2 percent of the total number of mills in the 1938 study, they accounted for only 2.2 percent of the workers. They employed only six-tenths of 1 percent of the northern and 2.7 percent of the southern workers. To exclude these 6 mills from the tabulations of the 1938 data increases the 1938 average hourly earnings figure by scarcely one-tenth of 1 cent, and the respective North and South regional averages by less than one-twentieth of 1 cent. Furthermore, it is estimated that such an adjustment would not change the distribution by average hourly earnings of workers for either the North, the South, or the country as a whole, by more than one-tenth of 1 percent in any average hourly earnings interval.

[18] The term "identical mills" as used herein refers to the complete 1938 sample of 97 mills, and the 1940 sample of 91 mills which were still in business at the time of the 1940 survey.

[19] The practically indentical averages obtained in 1940 from the two samples of 91 and 237 mills (41.3 and 41.2 cents, respectively) are a commentary on the representative character of the plants included in the sample.

TABLE 11.—*Changes in Average Hourly Earnings From 1938 to 1940 in 91 Seamless-Hosiery Mills, by 1938 Plant Averages*

1938 plant-average hourly earnings	Total number of mills classified as of 1938	Average hourly earnings in—			Estimated direct percent of increase resulting from minimum wage under Fair Labor Standards Act [1]
		September 1938	September 1940		
			Average	Percent of increase over 1938 average	
All 1938 plants	91	$0.351	$0.413	17.7	10.1
Under 25.0 cents	9	.226	.351	55.3	52.7
25.0 and under 27.5 cents	8	.265	.373	40.8	28.8
27.5 and under 30.0 cents	9	.291	.385	32.3	21.3
30.0 and under 32.5 cents	7	.314	.384	22.3	14.2
32.5 and under 35.0 cents	15	.337	.395	17.2	9.0
35.0 and under 37.5 cents	4	.367	.402	9.5	3.8
37.5 and under 40.0 cents	12	.385	.417	8.3	
40.0 and under 42.5 cents	4	.410	.429	4.6	2.2
42.5 and under 45.0 cents	14	.436	.484	11.0	
45.0 and under 47.5 cents	4	.459	.492	7.2	.6
47.5 cents and over	5	.512	.523	2.1	

[1] Source: U. S. Department of Labor, Wage and Hour Division, Research and Statistics Branch, Minimum Wages in the Seamless-Hosiery Industry, March 1941 (p. 63).

That the application of a minimum wage would result in a pronounced concentration of workers' earnings at and slightly above the wage floor was to be expected. However, the wage adjustment that occurred subsequent to September 1938, was more far reaching than a mere increase of the wages of the lowest-paid workers to 32.5 cents. Occupational and skill differences also were maintained to a limited extent, causing wage increases among workers of all wage levels. This fact is clearly shown in table 12, which gives a distribution of employees by average hourly earnings for both the 1938 and the 1940 periods. A comparison of the data for the 2 years shows the extent to which the earnings of workers at various wage levels were adjusted.

TABLE 12.—*Cumulative Percentage Distribution of Seamless-Hosiery Workers, 1938 and 1940, by Average Hourly Earnings and by Region*

Average hourly earnings	All regions		North		South	
	1938	1940	1938	1940	1938	1940
Under 32.5 cents	48.8	3.7	22.5	2.9	57.4	3.9
32.5 and under 35.0 cents	58.5	35.9	35.9	25.7	65.8	39.6
35.0 and under 37.5 cents	66.9	49.7	47.2	38.2	73.2	53.9
37.5 and under 40.0 cents	73.4	60.2	56.8	48.5	78.7	64.5
40.0 and under 42.5 cents	79.0	68.9	64.7	57.6	83.6	73.0
42.5 and under 47.5 cents	86.3	81.1	76.1	72.7	89.6	84.1
47.5 and under 52.5 cents	90.7	88.3	83.3	82.0	93.1	90.6
52.5 and under 57.5 cents	93.5	92.2	88.2	87.2	95.1	94.0
57.5 and under 62.5 cents	95.3	94.2	91.9	90.6	96.3	95.5
62.5 and under 67.5 cents	96.8	95.9	94.2	92.9	97.5	97.0
67.5 and under 72.5 cents	98.0	97.0	96.7	95.2	98.2	97.7
72.5 and under 77.5 cents	98.8	98.1	98.2	97.1	98.8	98.4
77.5 and under 82.5 cents	99.2	98.6	98.7	97.9	99.2	98.8
82.5 and under 87.5 cents	99.3	99.0	99.1	98.7	99.3	99.0
87.5 and under 92.5 cents	99.6	99.5	99.6	99.2	99.6	99.5
92.5 and under 100.0 cents	99.8	99.7	99.8	99.6	99.8	99.7
100.0 cents and over	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers	18,270	17,346	4,465	4,657	13,805	12,689
Average hourly earnings	$0.351	$0.413	$0.412	$0.443	$0.331	$0.402

In 1938, almost half (48.8 percent) of the workers in the industry earned less than 32.5 cents, and an additional one-tenth (9.7 percent) received wages between 32.5 and 35.0 cents. The September 1940 pay rolls for the same companies, however, showed only 35.9 percent of the workers earning less than 35.0 cents, as compared with the 58.5 percent whose wages were below that level in 1938.

Possibly a portion of the advance above 32.5 cents may be attributed to the fact that some of the mills were producing goods under Government contracts, in which the payment of at least 35.0 cents an hour was mandatory.[20] However, only 9 of the 91 mills reported that they were working on Government contracts at the time of the survey, and the average wage in those 9 mills was almost identical with the average for the industry as a whole. Furthermore, the distribution table clearly shows that the wages of a substantial number of the workers in the higher wage brackets also were advanced somewhat. Fully 39.8 percent of all workers earned 40 cents or over in 1940, as compared with 26.6 percent in 1938. Wages of 47.5 cents or more an hour were received by 18.9 percent of the employees in 1940, but only 13.7 percent were paid as much in 1938. Such changes in the distributions of workers are found in both the North and the South.

CHANGES IN MILLS OF VARIOUS WAGE LEVELS

Changes are found in varying degrees among mills of all wage levels. Naturally those establishments in which the average wage was formerly at or below the minimum fixed were called upon to make larger adjustments than were made in the high-wage establishments, but average wages increased in all except a very few mills. Earnings in those mills which paid an average wage lower than 25.0 cents in 1938 were increased by 55.3 percent, or from 22.6 cents to 35.1 cents. This represented little more than the increase (52.7 percent) which was necessary to meet the minimum-wage requirements. Mills which paid average wages between 25.0 and 27.5 cents in 1938 increased their group average by 40.8 percent, as compared with a required advance of 28.8 percent. Even the mills which paid wages of 40.0 to 47.5 cents in 1938 showed a substantial increase during the 2-year period. Table 11 shows what happened to average wages in mills which maintained various wage levels in 1938.

[20] Decision of the Secretary. In the Matter of Determination of the Prevailing Minimum Wage in the Seamless-Hosiery Industry, July 8, 1937. The determination provided for a tolerance, not to exceed 5.0 percent of the workers in any one establishment, for learners and handicapped or superannuated workers. Such workers are to be paid not less than 28 cents an hour.

TABLE 13.—*Cumulative Percentage Distribution of Seamless-Hosiery Workers, by Average Hourly Earnings in 1938 and 1940 and by Groups of Mills With Specified Wage Levels in 1938*

Average hourly earnings (in cents)	Percentage distribution of workers in mills paying average hourly wages in 1938 of—															
	Under 25.0 cents		25.0 and under 27.5 cents		27.5 and under 30.0 cents		30.0 and under 32.5 cents		32.5 and under 35.0 cents		35.0 and under 40.0 cents		40.0 and under 45.0 cents		45.0 cents and over	
	1938	1940	1938	1940	1938	1940	1938	1940	1938	1940	1938	1940	1938	1940	1938	1940
Under 32.5	92.8	5.3	87.4	4.5	77.5	1.6	68.2	8.5	56.1	4.0	31.5	2.8	17.4	2.9	9.6	1.4
Under 35.0	94.7	70.9	90.6	52.5	84.5	51.4	77.8	48.0	67.7	39.6	47.1	33.1	27.9	20.2	15.9	5.4
Under 37.5	95.7	83.8	93.3	68.5	87.9	66.9	84.4	64.3	77.7	55.9	60.9	47.1	38.3	32.7	23.3	12.5
Under 40.0	96.3	90.0	94.7	77.2	89.7	77.8	87.7	75.5	84.0	67.4	70.6	59.8	49.4	42.9	32.5	20.3
Under 42.5	96.6	92.9	96.0	84.6	91.9	83.8	90.7	81.1	87.8	76.3	78.8	70.0	59.6	52.8	42.3	32.1
Under 47.5	97.5	96.1	97.1	92.5	93.3	90.0	93.5	89.1	92.9	86.6	88.1	83.6	73.1	69.2	59.6	53.9
Under 52.5	98.2	98.0	98.3	96.1	95.5	93.3	95.9	93.0	94.9	92.3	91.9	90.3	82.7	80.5	71.4	69.8
Under 57.5	99.2	98.8	98.8	97.7	96.6	95.2	97.1	95.3	96.0	94.6	93.9	93.1	88.3	87.7	80.6	79.9
Under 62.5	99.5	98.9	99.2	98.3	98.0	95.6	98.1	96.6	96.8	95.9	95.3	94.5	91.6	91.6	86.1	85.3
Under 67.5	99.6	99.5	99.3	98.8	98.8	97.1	98.5	97.6	97.5	97.2	97.1	96.3	94.2	94.1	90.3	88.8
Under 72.5	99.7	99.7	99.6	99.1	99.5	98.0	98.8	98.1	98.3	97.9	98.4	97.4	95.8	95.8	93.8	91.6
Under 77.5	99.8	99.8	99.7	99.5	99.6	98.5	99.1	99.0	98.8	98.7	99.3	98.6	97.0	97.0	96.4	94.0
Under 82.5	99.9	99.9	99.8	99.6	99.7	98.9	99.3	99.3	99.4	99.2	99.5	99.1	98.0	97.7	97.1	95.1
Under 87.5	99.9	99.9	99.8	99.7	99.7	98.9	99.3	99.6	99.5	99.4	99.6	99.4	98.3	98.1	97.6	96.6
Under 92.5	100.0	99.9	99.9	99.7	99.8	99.2	99.5	99.8	99.7	99.8	99.7	99.7	99.0	99.2	98.8	98.0
Under 100.0	.....	99.9	100.0	99.9	99.9	99.4	99.6	99.9	99.7	99.9	99.8	99.8	99.6	99.4	99.4	99.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers	1,471	1,188	1,680	1,594	1,424	1,176	1,814	1,505	3,180	3,032	4,159	4,099	2,613	2,803	1,929	1,949

The changes that occurred in the wage structure within mills which maintained various wage levels in 1938 may be judged from a comparison of the distributions, by individual average hourly earnings, of the workers in those mills for both years. All except the highest-wage mills (those in which earnings averaged as high as 45.0 cents an hour in 1938) still showed in 1940 a marked concentration of workers below 35.0 cents. In mills of all wage levels, however, the earnings of at least a part of the workers who were already receiving wages above the minimum were indirectly affected by the Fair Labor Standards Act. Even in the lowest-wage group of plants, in which earnings were raised an average of 12.5 cents an hour, the wages of the higher-paid workers were advanced above their former level. Only 5.3 percent of the employees in these low-wage mills earned as much as 35.0 cents an hour in 1938, but, in 1940, 29.1 percent received that wage or more; 16.2 percent earned 37.5 cents and over, compared with 4.3 percent in 1938; and 10.0 percent were paid as much as 40.0 cents, whereas only 3.7 percent obtained that amount in September 1938. A comparison of wages for the 2 years in mills of other levels may be observed in table 13.

DIFFERENCES IN ADJUSTMENTS BY MILLS WITH SIMILAR WAGE LEVELS IN 1938

In view of the fact that upward wage adjustments were made which were not required under the Fair Labor Standards Act, some deviation from uniformity of response is to be expected even among establishments which had similar wage levels in 1938. An examination of the pay rolls of individual establishments shows that in a few mills the minimum wage literally became the maximum, even for the higher-skilled occupations. Piece rates had not yet been adjusted to permit average workers to earn the minimum wage, and the pay rolls carried "make-up" for practically all piece workers. There was also an occasional mill which had reduced its wages to bring them nearer the minimum, but the latter were very exceptional cases. Wages had increased in most of the establishments, but varying degrees of adjustment were made among mills in which the wage levels of 1938 were similar.

The movement of individual mills within the various average wage groups may be observed in table 14. Although the 2.5-cent class interval used in the distribution obscures the full extent of the adjustment which occurred, it is evident that the wage increases in some mills were substantially larger than in others of the same 1938 wage class.[21] For example, the 15 mills which paid average wages between 32.5 and 35.0 cents in 1938 had a group average of 39.5 cents in 1940 (table 11), but there was a variation of approximately 10 cents in their individual 1940 mill-average wages. One of them was still in the 32.5- to 35.0-cent bracket, 1 had moved into the 35.0- to 37.5-cent bracket, 7 paid wages between 37.5 and 40.0 cents, 5 between 40.0 and 42.5 cents, and 1 had reached the 42.5- to 45.0-cent class. Similar differences are observed among mills of all wage levels.

[21] It should be observed that a slight difference in the average wage of a plant may result from a shift either in type of machinery or in type of product, due to the resultant change in the influence of certain occupational groups on the average wage for the plant. Shifts from transfer-top to fully automatic knitting machines occurred in a number of establishments within the 2-year period. As a result, the relatively high-wage machine fixers formed a higher proportion of the labor force and the number of knitting-machine operators was reduced. Furthermore, operators of automatic knitting machines are typically a higher-wage group than the transfer-top operators. Such changes in the occupational structure of establishments would hardly account for the amount of variation that is disclosed in table 14.

TABLE 14.—*Changes in Distribution of Identical Seamless-Hosiery Mills, 1938 to 1940, by Plant-Average Hourly Earnings*

1938 plant-average hourly earnings interval	Total number of mills, classified as of 1938	Number of mills paying average hourly wages in 1940 of—							
		32.5 and under 35.0 cents	35.0 and under 37.5 cents	37.5 and under 40.0 cents	40.0 and under 42.5 cents	42.5 and under 45.0 cents	45.0 and under 47.5 cents	47.5 and under 50.0 cents	50.0 cents and over
All earnings intervals	91	6	11	26	15	16	6	7	4
Under 25.0 cents	9	5	4						
25.0 and under 27.5 cents	8		3	4	1				
27.5 and under 30.0 cents	9		1	6	1	1			
30.0 and under 32.5 cents	7			5	2				
32.5 and under 35.0 cents	15	1	1	7	5	1			
35.0 and under 37.5 cents	4			2	1	1			
37.5 and under 40.0 cents	12		1	1	5	4	1		
40.0 and under 42.5 cents	4			1		3			
42.5 and under 45.0 cents	14		1			6	4	2	1
45.0 and under 47.5 cents	4						1	3	
47.5 and under 50.0 cents	2							1	1
50.0 cents and over	3							1	2

COMPARISON OF OCCUPATIONAL WAGE DIFFERENCES, 1938 AND 1940

It is reasonable to assume that the present variation in wage levels among mills which paid similar wages in September 1938 is largely the result of varied policy with respect to the maintenance of occupational differences. Practically all occupational groups received wage increases (table 15). Furthermore, the average wage for most of the occupations was increased in mills of all wage levels. Nevertheless, it is apparent that the differences which formerly existed were not maintained in many plants, since the over-all differences among the occupational groups narrowed sharply.

As would be expected, the proportionate increase in wages among the low-wage occupations was substantially greater than that which occurred among the higher-wage groups. The largest proportionate increase in the average wage of any total occupational group (except learners) was a 29.0-percent increase which raised the average earnings of clippers and trimmers from 30.0 to 38.7 cents. The average wages of knitters were increased by 21.4 percent, and those of loopers slightly more. On the other hand, boarders (a large group of production workers whose typical wage is higher than the industry average) had an over-all wage increase of only 14.8 percent.

TABLE 15.—*Average Hourly Earnings of Seamless-Hosiery Workers, September 1938 and September 1940, by Occupation and by Groups of Mills with Specified Wage Levels in 1938*

Occupational group	All workers		Workers in mills paying average hourly wages in 1938 of—											
			Under 25.0 cents		25.0 and under 30.0 cents		30.0 and under 35.0 cents		35.0 and under 40.0 cents		40.0 and under 45.0 cents [1]		45.0 cents and over	
	1938	1940	1938	1940	1938	1940	1938	1940	1938	1940	1938	1940	1938	1940
All occupations	$0.351	$0.413	$0.226	$0.351	$0.277	$0.379	$0.328	$0.391	$0.378	$0.411	$0.429	$0.449	$0.479	$0.505
Machine fixers	.621	.650	.439	.487	.515	.547	.611	.652	.610	.630	.726	.715	.753	.805
Machine fixers' helpers [2]	.431	.408	.311	.338	.407	.378	.429	.416	.426	.417	.503	(3)	(3)	(3)
Knitters	.323	.392	.212	.337	.252	.350	.309	.371	.369	.399	.447	.452	.454	.493
Separators	.316	.373	.221	.334	.228	(3)	.325	.382	.340	.357	.399	(3)	.373	(3)
Welters, cuff sewers and mock seamers	.336	.395	.236	.356	.263	.356	.303	.378	.350	.387	.403	.407	.404	.460
Clippers and trimmers	.300	.387	.213	.368	.242	.384	.275	.376	.321	.386	.333	.401	.418	.426
Inspectors	.312	.375	.204	.342	.260	.364	.289	.364	.327	.370	.356	.391	.416	.425
Menders	.312	.378	.165	.331	.250	.352	.283	.353	.337	.393	.365	.376	.399	.436
Loopers	.326	.398	.200	.353	.260	.377	.302	.384	.339	.379	.407	.434	.448	.474
Kettlemen [2]	.397	.399	(3)	.333	.334	.371	.366	.378	.420	.402	.492	.416	.542	.511
Dye-house laborers	.298	.364	(3)	(3)	.250	(3)	.285	.332	.334	.365	.345	.364	(3)	.391
Boarders	.378	.434	.250	.370	.296	.379	.363	.414	.382	.419	.444	.476	.519	.558
Pairers	.322	.390	.218	.343	.261	.356	.295	.374	.388	.386	.368	.412	.432	.457
Folders and boxers [2]	.334	.376	.220	.335	.261	366	.303	.361	.368	.394	.360	.361	.456	.430
Stampers and transferers	.304	.380	.155	.343	.255	.343	.295	.362	.339	.394	.386	.415	.380	.414
Clerks, male	.420	.476	(3)	(3)	.322	.419	.385	.422	.441	.472	.501	.508	(3)	.631
Clerks, female	.332	.364	(3)	(3)	(3)	(3)	.291	.353	.336	.359	(3)	(3)	.455	(3)
Learners	.188	.262	.130	.262	.141	.257	.209	.258	.190	.260	.234	.259	.477	.297
Foremen	.721	.818	.566	(3)	.609	.824	.756	.710	.728	.861	.757	.841	.842	(3)
Miscellaneous semiskilled production workers	.342	.396	.239	.341	.262	.359	.311	.362	.357	.401	.403	.419	.482	.489
Miscellaneous unskilled production workers	.295	.359	.193	.322	.234	.324	.292	.355	.321	.340	.334	.369	.363	.431
Miscellaneous skilled nonproduction workers	.551	.639	(3)	(3)	.466	.535	.452	(3)	.529	.590	.613	.665	.710	.754
Miscellaneous semiskilled nonproduction workers	.383	.411	(3)	(3)	.312	.355	.361	.347	.393	.382	.429	.459	.520	.595
Miscellaneous unskilled nonproduction workers	.326	.360	(3)	(3)	.230	.325	(3)	.325	(3)	(3)	(3)	(3)	(3)	(3)
Watchmen	.311	.362	(3)	(3)	.241	.334	.296	.330	.357	.375	.314	.355	.422	.469
Janitors and cleaners	.285	.362	(3)	(3)	.209	.327	.273	.326	.307	.358	(3)	.367	.348	.424

[1] This group contained 2 mills which had reduced wages below the 1938 level.
[2] The occupational groupings for 1938 and 1940 are not exactly comparable.
[3] Averages were not computed for fewer than 10 workers.

EARNINGS AND HOURS IN THE PROCESSED-WASTE INDUSTRY, 1940 [1]

Summary

HOURLY earnings of employees in the processed-waste industry averaged 42.7 cents in September 1940, according to a survey recently completed by the Bureau of Labor Statistics.[2] Employees in northern establishments received an average of 47.3 cents, contrasted with the 32.9 cents earned by workers in southern mills. Wage earners in waste-sorting plants averaged 34.6 cents, a figure considerably below the 46.9 cents paid to employees in garnetting plants.[3]

Definition of the Industry

The Administrator of the Wage and Hour Division has defined the processed-waste industry as consisting of "the processing of waste from cotton, silk, flax, jute or any synthetic fiber, or from mixtures of these fibers with wool or animal fiber (other than silk), provided these mixtures do not contain more than 25 percent by weight of wool or animal fiber (other than silk)." This definition has been interpreted to include the preparation of wiping rags and of oakum.[4]

In general, the definition of the industry used in the Bureau's survey conformed to that of the Administrator. Establishments engaged primarily in the preparation of wiping rags or of oakum, however, were not covered and for practical reasons the survey excluded plants employing fewer than 10 workers. Plants employing 10 or more workers are believed to account for roughly nine-tenths of the employment in the industry.

Scope of Survey and Nature of Data Obtained

The "processed waste and recovered wool fibers industry," as classified by the Census of Manufactures, consisted in 1939 of 153 establishments employing 4,844 wage earners. The industry classification used by the census, however, is considerably broader than that used in the survey on which this report is based, since the census included small plants (all establishments with an annual product valued at $5,000 or more), plants engaged in the preparation of oakum, and a substantial number of plants engaged in the cleaning and recovery of wool shoddy. Preliminary investigation by the

[1] Prepared by Louis M. Solomon, of the Bureau's Division of Wage and Hour Statistics, under the supervision of H. E. Riley.

[2] This study was made at the request of the Wage and Hour Division, for use by an industry committee in determining its recommendations for a minimum wage.

[3] These plants recover the original fiber from waste yarn, thread, or cloth.

[4] Oakum is the material, sometimes tarred, obtained by untwisting old hemp rope; it is extensively used for calking boat seams and for packing.

Bureau indicated that approximately 60 mills, or about two-fifths of the number reported by the Census of Manufactures, fell within the scope of the survey. Approximately half (31) of these establishments were studied. The sample in each State and region was carefully selected in order to provide proportional representation with respect to such factors as product, size of plant, location, and unionization.

The survey was made by the Bureau's staff of field representatives, who obtained the necessary data directly from company records through personal observation of processes and plant practices and by means of interviews with plant officials. The information obtained from each establishment included actual hours worked and earnings received by each employee during a selected pay-roll period.[5] In transcribing wage data the field representatives reported earnings at regular rates of pay separately from those resulting from application of an extra overtime rate. The wage data presented in this report include only the earnings at regular rates of pay.[6]

The information obtained from each establishment also included certain pertinent facts regarding the plant and its products, and the occupation, sex, race, and method of payment of each worker. As this was the first survey of this industry to be made by the Bureau, the field representatives prepared a description of duties involved in each occupation encountered. Through interviews with plant officials, an estimate of the degree of skill required of employees in each occupational group was obtained. This information supplied a basis for the occupational groupings and skill classifications used in the present report. Information was obtained for both factory and clerical employees, but the data for clerical employees have been excluded from all tabulations except table 4, which presents occupational averages.

Characteristics of the Industry

The processed-waste industry embraces two fairly well-defined groups of establishments—those mills which are engaged primarily in sorting and garnetting or grinding of mill wastes and clippings, and a smaller group of plants whose operations are confined to cleaning and sorting of waste yarn and thread. The term "garnetting" is used to describe the recovery of the original staple fiber from waste yarn, thread, or cloth; grinding is the reduction of mill waste to short, fine particles, known as "flock." Sorting, as the name suggests, involves the distribution of the component elements of a heterogeneous mass of waste into lots of the same fiber, color, or length. Of the 31 mills

[5] A majority of reports covered pay-roll periods in August or September 1940.

[6] Had the extra overtime earnings been included, the industry average would have been increased by only six-tenths of a cent.

included in the study, 21 have been classified as garnetters and grinders, and 10 as waste-fiber sorters.

In view of the fact that the waste-processing industry obtains its raw materials from the spinning and weaving divisions of the textile industry, the establishments tend to be situated in or near textile-producing areas. Thus, there are sizable concentrations of plants in the New England States, and in the South, as well as in New Jersey and Pennsylvania.

TABLE 1.—*Regional Distribution of Mills and Employees Included in Survey of Processed-Waste Industry*

State	Number of mills	Employees	
		Number	Percent
United States	31	1,300	100.0
North	23	847	65.2
Massachusetts	9	244	18.8
New York	4	262	20.2
Pennsylvania	5	146	11.2
Other States [1]	5	195	15.0
South	8	453	34.8
Georgia [2]	4	305	23.4
North Carolina	4	148	11.4

[1] Includes 1 plant in Illinois, 2 in New Hampshire, 1 in New Jersey, and 1 in Wisconsin.
[2] Includes 1 plant in Alabama.

As is the case with other textile mills, processed-waste mills are widely scattered with regard to size of city, some being in small places of less than 10,000 population and others in metropolitan areas of a million or more. The plants are usually small; more than half of those included in the study employed fewer than 50 workers each and even the largest employed fewer than 500.

The industry is characterized by an exceptionally high proportion of unskilled workers. Of the employees included in the study, all of the females (who constituted one-fourth of the entire working force) and nearly 85 percent of the males were in unskilled occupations. More than one-third of the employees in the industry were Negroes, most of whom found employment in the South. Thus, all but 23 of the 453 workers in the southern mills were Negroes, whereas only 65 of the 847 workers in the northern region were Negroes.

Eight establishments, employing 418 wage earners, were reported as having effective union contracts or agreements regulating the hours and wage rates for substantial proportions of their employees. The union plants, all of which were located in Northern States, were confined to the garnetting and grinding branch of the industry. The Federation of Woolen and Worsted Workers of America, an A. F. of L. affiliate, and several A. F. of L. federal unions were parties to a majority of the union agreements.

Average Hourly Earnings

The hourly earnings of all wage earners in the processed-waste industry averaged 42.7 cents (table 2). Although the earnings of individual employees ranged from under 32.5 to over 82.5 cents per hour, well over half (54.5 percent) averaged less than 40 cents. Nearly two-fifths of the workers were receiving exactly 32.5 cents, which was the minimum legal wage rate for the textile industry at the time of the survey. A second sizable group of employees, about 13 percent of the total, were averaging between 55.0 and 57.5 cents an hour.

TABLE 2.—*Percentage Distribution of Employees in Processed-Waste Industry, September 1940, by Average Hourly Earnings, Sex, and Skill*

Average hourly earnings	All employees	Males				Females [1]
		Total	Skilled	Semi-skilled	Unskilled	
Under 32.5 cents	5.8	4.4	3.0	2.3	4.7	9.3
Exactly 32.5 cents	39.7	26.3	1.5	13.6	29.8	74.1
32.6 and under 35.0 cents	2.8	2.4	1.5	3.4	2.3	3.8
35.0 and under 37.5 cents	2.8	2.8	4.5	3.4	2.6	2.7
37.5 and under 40.0 cents	3.4	1.6	----	2.3	1.7	7.9
40.0 and under 42.5 cents	4.8	6.5	4.5	5.7	6.8	.5
42.5 and under 45.0 cents	2.9	3.5	----	3.4	3.9	1.4
45.0 and under 47.5 cents	6.5	8.9	3.0	8.0	9.5	.3
47.5 and under 50.0 cents	6.2	8.6	4.5	1.1	9.8	----
50.0 and under 52.5 cents	1.9	2.7	11.9	4.5	1.7	----
52.5 and under 55.0 cents	1.6	2.2	1.5	2.3	2.3	----
55.0 and under 57.5 cents	12.7	17.7	10.4	8.0	19.4	----
57.5 and under 62.5 cents	2.5	3.4	6.0	8.0	2.7	----
62.5 and under 67.5 cents	3.2	4.4	16.3	13.6	2.3	----
67.5 and under 72.5 cents	.9	1.3	9.0	4.5	.3	----
72.5 and under 77.5 cents	.8	1.2	4.5	8.0	.1	----
77.5 and under 82.5 cents	.5	.7	3.0	4.5	.1	----
82.5 cents and over	1.0	1.4	14.9	3.4	----	----
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	1,300	934	67	88	779	366
Average hourly earnings	$0.427	$0.460	$0.610	$0.532	$0.436	$0.332

[1] All females were classed as unskilled.

The distribution of hourly earnings for all wage earners combined shows broad dispersion and extreme irregularity. Among the factors apparently responsible for differences in earnings are the sex, skill, and color of the working force, the geographic location of the mills, the influence of unionization, and differences in type of product or manufacturing processes.[7]

DIFFERENCES BY SEX AND SKILL

Examination of table 2 reveals that wage levels were substantially higher for male than for female employees. Male workers averaged 46.0 cents per hour as against only 33.2 cents an hour for females.

[7] The small number of plants included in the study prevented any detailed analysis of the relationship between earnings and size of plant or size of community.

The difference in earnings of males and females is still quite significant even when the comparison is limited to workers in similar skill groups. Thus, unskilled males averaged 43.6 cents, or 10.4 cents more than the average received by the females, all of whom were in unskilled occupations. The small number of skilled and semiskilled males averaged, respectively, 61.0 cents and 53.2 cents an hour.

Earnings in the upper wage levels were confined largely to skilled and semiskilled males. As shown by the distribution in table 2, nearly one-half (47.7 percent) of the skilled and fully one-third (34.0 percent) of the semiskilled males averaged 62.5 cents or more, whereas less than 3 percent of the unskilled male workers received this much. None of the female employees averaged as much as 47.5 cents. Striking differences are also in evidence among the lowest-paid workers. Nearly three-fourths (74.1 percent) of the females received exactly 32.5 cents an hour, whereas only 16.6 percent had earnings exceeding that amount. A substantial proportion (29.8 percent) of the unskilled males but only 1 of the 67 skilled males were paid the legal minimum.

VARIATIONS BY REGION AND OTHER FACTORS

Average hourly earnings of employees of northern mills were markedly higher than those of workers in southern plants. Southern workers averaged 32.9 cents (table 3), compared with an average of 47.3 cents received by employees of northern establishments. Employees averaging 32.5 cents or less represented only 19.4 percent of northern workers, but almost 95 percent of the southern wage earners. Earnings exceeding 50 cents an hour were confined almost entirely to workers in northern plants.

TABLE 3.—*Percentage Distribution of Employees in Processed-Waste Industry, September 1940, by Average Hourly Earnings and Region*

Average hourly earnings (in cents)	United States	North	South	Average hourly earnings (in cents)	United States	North	South
Under 32.5	5.8	1.7	13.5	57.5 and under 62.5	2.5	3.7	.2
Exactly 32.5	39.7	17.7	81.1	62.5 and under 67.5	3.2	4.6	.4
32.6 and under 35.0	2.8	3.7	1.1	67.5 and under 72.5	.9	1.3	.2
35.0 and under 37.5	2.8	3.5	1.3	72.5 and under 77.5	.8	1.3	----
37.5 and under 40.0	3.4	5.2	----	77.5 and under 82.5	.5	.8	----
40.0 and under 42.5	4.8	7.0	.9	82.5 and over	1.0	1.5	----
42.5 and under 45.0	2.9	4.5	----				
45.0 and under 47.5	6.5	9.7	.4	Total	100.0	100.0	100.0
47.5 and under 50.0	6.2	9.3	.2				
50.0 and under 52.5	1.9	3.0	----	Total number of employees	1,300	847	453
52.5 and under 55.0	1.6	2.5	----	Average hourly earnings	$0.427	$0.473	$0.329
55.0 and under 57.5	12.7	19.0	.7				

This pronounced regional disparity in earnings is partly attributable to the dissimilar proportions of garnetting and sorting plants, respectively, in the two areas. Only 3 of the 8 southern establishments were garnetters, whereas 18 of the 23 northern mills were engaged in garnetting and grinding operations. Average hourly earnings were

substantially higher in garnetting and grinding plants than in those establishments whose operations were confined to sorting. Thus, the average for all employees in the former group was 46.9 cents an hour, or 12.3 cents above the average (34.6 cents) for those in the latter group. This contrast is emphasized by comparing the general averages of plants, which show that 14 of the 21 garnetting plants averaged 45 cents or more, whereas only 1 of the 10 sorting mills paid its employees at rates averaging 45 cents. On the other hand, 6 of the 10 sorting plants averaged under 35 cents, while only 3 of the garnetting and grinding establishments had averages below that level.[8] The distribution of mills in the processed-waste industry in September 1940 is shown, by type of mill and by mill average hourly earnings, in the accompanying statement.

Mill average hourly earnings:	*Garnetting and grinding mills*	*Sorting mills*
30.0 and under 35.0 cents	3	6
35.0 and under 40.0 cents	2	2
40.0 and under 45.0 cents	2	1
45.0 and under 50.0 cents	8	1
50.0 and under 55.0 cents	3	--
55.0 cents and over	3	--
Total	21	10

The pronounced difference in earnings between the two types of mills is due in part to differences in the proportion of female workers. Woman workers account for fully 40 percent of the total wage earners in sorting mills but only about 20 percent in garnetting mills. As has previously been pointed out, female workers, even in similar skill groups, command lower wages than their male fellow workers.

A second factor contributing to the difference in earnings is the higher proportion of skilled workers found in garnetting and grinding mills. These mills perform a considerable amount of machine work which requires a greater number of skilled operatives than are needed for the relatively simple sorting operations. Thus, 13.8 percent of the garnetting-mill employees, as compared with only 8.7 percent of the sorting-mill employees were skilled or semiskilled.

As indicated in the distribution figures below, wages in mills with union contracts were slightly higher than those in comparable nonunion mills. Only northern garnetting mills are included in the distribution, since none of the sorting mills and none of the southern mills had an agreement with a union. All union establishments were paying wages averaging at least 45 cents, whereas 4 of the 10 nonunion mills averaged less than 45 cents. The average for all union

[8] The difference in earnings between garnetting and sorting plants, in fact, is still considerable when the comparison is limited to plants in the same area. Thus, in the South, the employees of garnetting plants averaged 33.6 cents per hour, whereas sorting-mill workers averaged 32.5 cents. In the North, a considerably greater difference is apparent, as sorting-plant workers averaged only 37.4 cents, which is 12.6 cents below the 50.0-cent average received by garnetting employees.

plants combined was 52.8 cents, as against an average of 45.5 cents in the nonunion plants.

Mill average hourly earnings:	Garnetting mills	
	Union	Nonunion
35.0 and under 40.0 cents		2
40.0 and under 45.0 cents		2
45.0 and under 50.0 cents	3	5
50.0 and under 55.0 cents	3	--
55.0 cents and over	2	1
Total	8	10

It has already been pointed out that a large majority of the southern employees are Negroes, while most of the workers in northern mills are white. This suggests the possibility that the regional differences in earnings may be due largely to differences in wage levels for white and Negro workers. Such evidence as can be obtained from available data, however, does not support this conclusion. Thus, the 65 Negro workers in northern plants averaged 46.6 cents as compared with 47.4 for the white employees in these mills, a difference of only eight-tenths of a cent. Almost all of the white employees scheduled in southern mills are in skilled occupations and hence receive higher wages on the average than were paid to the Negroes, virtually all of whom were unskilled.

OCCUPATIONAL DIFFERENCES [9]

The small number of workers in skilled and semiskilled occupations permits the presentation of separate data only for foremen, who averaged 60.6 cents (table 4). Unskilled males had average earnings ranging from 53.9 cents for picker tenders to 35.4 cents for hand truckers.

TABLE 4.—*Average Hourly Earnings, Weekly Hours, and Weekly Earnings in Processed-Waste Industry, September 1940, by Sex, Skill, and Occupation*

Sex, skill, and occupation	Number of employees	Average hourly earnings	Average weekly hours	Average weekly earnings
Factory employees:				
Males	934	$0.460	39.2	$18.01
Skilled workers	67	.610	41.8	25.53
Foremen	36	.606	42.1	25.48
Miscellaneous skilled, indirect	31	.615	41.6	25.58
Semiskilled workers	88	.532	43.4	23.08
Miscellaneous semiskilled, direct	31	.537	41.7	22.41
Miscellaneous semiskilled, indirect	57	.529	44.3	23.44
Unskilled workers	779	.436	38.5	16.79
Baggers	30	.495	40.4	19.96
Baling press operators	104	.402	39.2	15.74
Breaker tenders	25	.454	43.2	19.59
Garnett, willower, and comber tenders	134	.446	39.3	17.52
Picker tenders	98	.539	35.3	19.01
Shredder tenders	44	.464	38.0	17.63
Truckers, hand	137	.354	36.1	12.76
Watchmen	25	.389	41.4	16.09
Miscellaneous unskilled, direct	147	.455	40.8	18.57
Miscellaneous unskilled, indirect	35	.387	35.8	13.88
Females: Unskilled workers	366	.332	34.7	11.50
Sorters	302	.327	34.2	11.19
Miscellaneous unskilled	64	.351	36.9	12.95
Clerical employees	60	.588	39.8	23.36

[9] Although the data at hand are not sufficient to permit analysis by occupation for the North and South separately, substantial regional variations existed.

The largest occupational group numerically, and the only one among female employees for which data could be shown, consisted of sorters, whose average of 32.7 cents was the lowest found for any group. Clerical employees, whose earnings have been excluded from tabulations presented earlier, averaged 58.8 cents.

Weekly hours ranged from 43.2 worked by breaker tenders to 34.2 for sorters. The highest weekly earnings averaged by any group was the $25.48 received by foremen. Sorters, whose earnings were influenced by a combination of low hourly earnings and a shorter-than-average workweek, averaged only $11.19.

HOURLY EARNINGS IN JUTE-BAGGING INDUSTRY, 1940

AT THE request of the Wage and Hour Division, the Bureau of Labor Statistics made a survey of average hourly earnings in the jute cotton bagging industry.

The survey was limited to the manufacture of jute cotton bale coverings, including both the spinning and weaving of the jute yarns. The operations covered also include the repairing of used bagging. The survey did not include the manufacture of jute carpet yarns or jute fabrics for purposes other than cotton bale coverings. Neither did it include jute cordage and twine, which was covered in a separate study of the cordage and twine industry.

According to information available at the time of the survey, there were 12 mills in the United States producing either new or reworked cotton bagging; all of these were in the cotton-growing States. The Bureau was able to study only 9 mills, however, as one company, controlling 3 mills, refused to furnish the information requested. The number of wage earners scheduled totaled 1,116.

During the period covered by the study, September 1940, hourly earnings of the wage earners averaged 33.8 cents. Over one-half (56.7 percent) of the workers received exactly 32.5 cents, the legal minimum at the time of the survey, while 85.9 percent averaged under 35 cents an hour. Only 5.2 percent of the employees averaged over 40 cents an hour.

Detailed data cannot be presented for this industry, because to do so would reveal plant identities.

SALARIES OF SCHOOL EMPLOYEES, 1940–41

MEDIAN salaries of school employees in cities of the United States having over 100,000 population were higher in the majority of occupations in 1940–41 than in 1938–39, and in many cases exceeded those of 1930–31, the earliest period covered in a report on salaries of city school employees published by the National Education Association of the United States (Washington).[1]

For both kindergarten teachers and elementary-school teachers, median salaries in 1940–41, in cities of over 100,000 population, were 7 percent higher than in 1930–31; for junior high-school teachers, 5.24 percent; and for senior high-school teachers, 1.35 percent. Salaries of principals and superintendents in 1940–41 were below the 1930–31 level—2.81 percent for supervising elementary-school principals, 2.16 percent for junior high-school principals, 5.76 percent for senior high-school principals, and 13.95 percent for superintendents of schools. However, over the period from 1935 to 1941 there were substantial increases in the salaries of both principals and superintendents, as well as of practically all other school employees, as is shown in table 1, reproduced from the report of the National Education Association. The data are based on reports from 86 of the 92 cities recorded in the 1940 census as having over 100,000 inhabitants.

The figures in table 1 indicate a tendency to pay higher salaries to teachers of older children, the 1940–41 median salaries of high-school teachers being $297 higher than of junior high-school teachers, who in turn received $203 more than elementary-school teachers. The National Education Association states, however, that there is a growing trend toward salary schedules based on preparation of the teachers rather than on the positions.

Median salaries in 1940–41 of four occupation groups in the cities of over 100,000 population are given in table 2, by city.

[1] Research Bulletin, Vol. XIX, No. 2, March 1941: Salaries of City School Employees, 1940–41

TABLE 1.—*Trends in Salaries of School Employees in Cities of Over 100,000 population, 1930–31 to 1940–41*

Type of school employee	Median salary paid in—						Percent of change		
	1930–31	1932–33	1934–35	1936–37	1938–39	1940–41	1931–1941	1935–1941	1939–1941
Classroom teachers									
Kindergarten	$2,077	$1,909	$1,926	$2,045	$2,208	$2,227	+7.22	+15.63	+0.86
Elementary school	2,118	1,947	1,922	2,027	2,217	2,268	+7.08	+18.00	+2.30
Atypical classes	2,372	2,100	1,996	2,182	2,393	2,357	−.63	+18.09	−1.50
Junior high school	2,348	2,204	2,078	2,303	2,450	2,471	+5.24	+18.91	+.86
High school	2,731	2,479	2,436	2,551	2,672	2,768	+1.35	+13.63	+3.59
Part-time or continuation school	2,695	2,793	2,693	2,886	2,198	2,458	−8.79	−8.73	+11.83
High-school department heads	3,436	3,008	2,913	3,288	3,512	3,536	+2.91	+21.39	+.68
Deans									
Junior high school	3,092	2,730	2,539	2,888	3,107	3,043	−1.58	+19.85	−2.06
High school	2,942	2,667	2,268	2,464	2,669	2,677	−9.01	+18.03	+.30
Principals									
Elementary school:									
Assistant principals	4,280	4,614	4,042	4,245	4,647	4,621	+7.97	+14.32	−.56
Teaching principals	2,436	2,184	2,135	2,207	2,633	2,315	−4.97	+8.43	−12.08
Supervising principals	3,519	3,102	3,016	3,225	3,339	3,420	−2.81	+13.40	+2.43
Junior high school:									
Assistant principals	3,496	2,899	2,850	3,106	3,318	3,940	+12.70	+38.25	+18.75
Principals	4,500	3,961	3,718	4,064	4,359	4,403	−2.16	+18.42	+1.01
High school:									
Assistant principals	5,544	3,647	3,453	3,569	3,992	3,869	−30.21	+12.05	−3.08
Principals	5,100	4,468	4,252	4,473	4,758	4,806	−5.76	+13.03	+1.01
Part-time or continuation school principals	4,111	3,700	4,125	5,125	3,900	4,050	−1.48	−1.82	+3.85
Administrative and supervisory staff									
Superintendents of schools	10,000	8,267	7,288	7,825	8,286	8,605	−13.95	+18.07	+3.85
Associate, assistant, or deputy superintendents	6,527	5,672	5,578	5,645	5,971	6,039	−7.48	+8.26	+1.14
Business managers	5,361	4,500	4,186	4,543	4,571	4,967	−7.35	+18.66	+8.66
Directors, assistant directors, or supervisors of:									
Research, tests, etc	3,400	3,010	2,925	3,020	3,417	3,333	−1.97	+13.95	−2.46
Vocational education	3,550	3,380	3,075	3,187	3,825	3,667	+3.30	+19.25	−4.13
Physical education	3,100	3,123	2,909	2,989	3,152	3,285	+5.97	+12.93	+4.22
Health	3,167	2,500	2,800	2,175	3,350	2,947	−6.95	+5.25	−12.03
Evening schools	.....	3,325	3,000	2,700	2,875	3,275	.....	+9.17	+13.91
Americanization classes	3,240	3,033	2,750	2,950	2,950	3,000	−7.41	+9.09	+1.69
Art	2,867	2,744	2,687	2,860	3,000	3,044	+6.17	+13.29	+1.47
Music	2,909	2,825	2,569	2,813	2,896	3,077	+5.78	+19.77	+6.25
Penmanship	2,933	2,789	2,727	2,907	2,889	2,960	+.92	+8.54	+2.46
Manual or industrial arts	3,450	3,308	3,278	3,136	3,137	3,480	+.87	+6.16	+10.93
Home economics	3,219	2,967	2,818	3,040	3,240	3,325	+3.29	+17.99	+2.62
Visual education	.....	.....	.....	.....	3,167	3,100	.....	.....	−2.12
Other school employees									
Secretarial and clerical employees:									
Secretaries to superintendents of schools	2,329	1,978	1,779	1,918	2,075	2,107	−9.53	+18.44	+1.54
Secretaries of boards of education	4,450	3,700	3,333	3,767	3,825	3,850	−13.48	+15.51	+.65
Clerks in principals' offices	1,281	1,133	1,147	1,218	1,299	1,355	+5.78	+18.13	+4.31
Clerks in other administrative and supervisory offices	1,581	1,442	1,450	1,528	1,590	1,628	+2.97	+12.28	+2.39
Superintendents of buildings	4,267	3,400	3,109	3,156	3,850	3,960	−7.19	+27.37	+2.86
Head janitors	2,500	2,000	1,564	2,657	2,063	3,022	+20.88	+93.22	+46.49
Janitors	1,541	1,265	1,211	1,297	1,429	1,419	−7.92	+17.18	−.70
Head nurses	2,138	2,029	1,875	1,943	2,000	2,050	−4.12	+9.33	+2.50
Nurses	1,715	1,611	1,512	1,706	1,739	1,764	+2.86	+16.67	+1.44
Chief attendance officers	3,125	2,783	2,530	2,767	2,788	2,967	−5.06	+17.27	+6.42
Attendance officers	2,078	1,971	1,888	2,063	2,219	2,241	+7.84	+18.70	+.99

TABLE 2.—*Median Salaries in Four Teaching Occupations in Cities of Over 100,000 Population, 1940–41*

City	Kindergarten teachers	Elementary-school teachers	Junior high-school teachers	Senior high-school teachers [1]
Birmingham, Ala		[2] $1,469		$1,697
Long Beach, Calif	$2,426	2,447	$3,000	3,000
Los Angeles, Calif	2,420	[3] 2,436	2,962	[3] 3,012
Oakland, Calif	2,448	2,460	2,830	2,838
Sacramento, Calif	2,100	2,100	2,370	2,700
San Diego, Calif	2,157	2,178	[4] 2,511	[5] 2,769
San Francisco, Calif	2,175	2,720	2,385	3,305
Denver, Colo	2,567	2,775	2,833	2,856
Bridgeport, Conn	1,700	2,000	2,070	2,334
Hartford, Conn	2,317	2,455	2,444	3,413
New Haven, Conn	1,825	1,853	2,100	2,468
Wilmington, Del	1,700	2,200	1,957	2,139
Washington, D. C	2,246	[6] 2,236	2,451	2,841
Miami, Fla.[7]		1,594	([8])	[3] 1,634
Atlanta, Ga	1,930	1,954	2,461	2,514
Chicago, Ill	2,313	2,334		3,515
Peoria, Ill	1,700	1,723	1,758	2,111
Fort Wayne, Ind	1,813	1,839		2,520
Gary, Ind	1,825	1,788		2,326
Indianapolis, Ind		1,999		2,243
South Bend, Ind	1,800	1,823	1,996	2,357
Des Moines, Iowa	1,894	1,832	1,883	2,053
Kansas City, Kans	1,575	1,723	1,912	2,208
Wichita, Kans	1,600	1,818	1,842	1,884
Louisville, Ky	1,700	1,659	1,839	2,265
New Orleans, La	1,659	1,658		2,236
Baltimore, Md	1,900	[9] 1,920	2,146	2,793
Boston, Mass	1,981	2,355	2,429	3,078
Fall River, Mass	1,550	1,615	1,945	2,106
Lowell, Mass	1,440	1,550	1,855	2,067
New Bedford, Mass	1,543	1,542	1,908	2,232
Somerville, Mass	1,830	2,015	2,144	2,226
Springfield, Mass	2,093	2,091	2,595	3,050
Worcester, Mass	2,043	2,051	2,530	2,761
Detroit, Mich	2,414	2,423	2,873	[10] 2,856
Flint, Mich	1,478	1,508	1,682	1,766
Grand Rapids, Mich	1,647	1,700	2,138	2,179
Duluth, Minn	1,817	1,802	1,989	2,169
Minneapolis, Minn	2,010	2,045	[4] 2,069	[11] 2,348
St. Paul, Minn	1,654	1,649		2,229
Kansas City, Mo	1,838	1,814	2,067	2,266
St. Louis, Mo	2,700	2,700		3,861
Omaha, Nebr	1,527	1,524		1,780
Camden, N. J	1,900	2,016	1,913	2,579
Elizabeth, N. J	2,100	2,036	2,291	2,681
Jersey City, N. J	1,650	2,242		3,329
Newark, N. J	3,271	3,012	2,375	3,045
Paterson, N. J	3,000	[3] 2,353		2,855
Trenton, N. J	2,350	2,390	2,058	3,370
Albany, N. Y	1,954	2,074	2,388	[10] 2,414
Buffalo, N. Y	2,100	2,158		2,550
New York, N. Y	3,331	3,344	3,830	4,503
Rochester, N. Y	2,213	2,181	([8])	[5] 2,710
Syracuse, N. Y	2,000	2,052	2,400	2,400
Yonkers, N. Y	3,083	3,244	3,650	4,000
Charlotte, N. C		1,345	1,343	1,321
Akron, Ohio		1,900		2,073
Canton, Ohio		1,800	([8])	[5] 2,154
Cincinnati, Ohio	2,488	2,592	2,674	3,000
Cleveland, Ohio	2,173	2,347	2,603	3,108
Columbus, Ohio		1,841	2,425	2,428
Dayton, Ohio		1,857		[12] 2,434
Toledo, Ohio		2,029	2,138	2,362
Youngstown, Ohio		2,000	[4] 2,664	[5] 3,014
Oklahoma City, Okla	1,425	1,467	1,432	1,769
Tulsa, Okla	1,633	1,807	1,800	1,900
Portland, Oreg	1,800	2,070		2,231
Erie, Pa	1,886	1,898	2,163	[10] 2,329
Philadelphia, Pa	2,200	2,243	[10] 2,639	[13] 3,052
Pittsburgh, Pa		2,243	2,837	3,276
Reading, Pa	2,017	2,082	2,338	2,522
Scranton, Pa	1,871	1,934	2,217	2,247
Providence, R. I	2,202	2,115	2,363	2,756
Knoxville, Tenn		1,438	1,547	1,700
Nashville, Tenn		1,350	1,353	1,752
Dallas, Tex		1,825	1,900	2,520
Fort Worth, Tex		1,523	1,447	1,807
Houston, Tex	1,650	1,919	1,855	2,133
San Antonio, Tex		1,620	[4] 1,665	[5] 1,689
Salt Lake City, Utah	1,300	1,750	1,917	2,017
Norfolk, Va		1,356	1,638	1,811
Richmond, Va	1,800	1,800	2,103	2,224
Seattle, Wash	([14])	[14] 2,282	2,595	2,608
Spokane, Wash		2,070	2,115	2,242
Tacoma, Wash		1,899	2,004	2,005
Milwaukee, Wis	2,438	2,459	[15] 2,441	[10] 2,656

[1] Excludes vocational-school teachers unless otherwise noted.
[2] Includes head teachers.
[3] Includes teachers of atypical classes.
[4] Excludes junior-senior high-school teachers; these teachers are reported with high-school teachers.
[5] Includes junior-senior high-school teachers.
[6] Includes Americanization teachers.
[7] Dade County including Miami.
[8] Junior high-school teachers are reported with high-school teachers.
[9] Includes occupational teachers.
[10] Includes vocational-school teachers.
[11] Includes vocational and junior-senior high-school teachers.
[12] Includes cooperative high-school teachers.
[13] Includes normal-school teachers.
[14] Kindergarten teachers are reported with elementary-school teachers.
[15] Includes junior-trade teachers; excludes junior-senior high-school teachers, who are reported with high-school teachers.
[16] Includes teachers of boys' and girls' trade and technical high schools and of junior-senior high schools.

In cities of under 100,000 population, salaries increased between 1935 and 1941, but in most cases were lower in 1940–41 than in 1930–31. Median salaries of high-school teachers are lower than they were 10 years ago by percentages ranging from 3.41, in cities of 30,000 to 100,000, to 7.69 in cities of from 2,500 to 5,000 population. Elementary school teachers in cities of from 10,000 to 100,000 population are being paid approximately the same as 10 years ago.

ANNUAL EARNINGS ON CANADIAN STEAM RAILWAYS, 1939

IN 1939 the average wage per hour for employees on steam railways in Canada was 62.5 cents as compared with 62.1 cents in 1938. The average annual earnings of employees on an hourly basis were $1,485 in 1939, an advance of $26 over the preceding year;[1] and those of employees paid on a daily, monthly, or annual basis [2] were $1,803 in 1939, an increase of $3 over those of 1938. These figures and the additional data given in the following statement covering average annual earnings by groups of employees are from the annual report on statistics of steam railways for 1939, issued by the Dominion Bureau of Statistics.

	Average annual earnings
All employees on an hourly basis	$1,485
Maintenance of way:	
Laborers	713
Sectionmen	1,036
Shop employees	1,373
Passenger engineers	3,566
Employees on a daily, monthly, or annual basis	1,803
Clerks	1,547
Executives, general officers and assistants	6,648

AGRICULTURAL WAGES IN COLOMBIA, MARCH 1940 [3]

THE daily rates most commonly paid for agricultural labor in Colombia in March 1940, ranged in the various geographical divisions from 15 to 50 centavos for men, and from 10 to 30 centavos for women in the cold climates; in the warm climates, they ranged from 25 to 60 centavos for men and from 15 to 40 centavos for women. In all of these cases board was also furnished. The current rates, without board, varied from 25 to 85 centavos for men and from 20 to 60

[1] Canadian Labor Gazette (Ottawa), April 1941.

[2] Includes executives, clerks, janitors, cleaners, office boys, etc., numbering 26,135.

[3] Data are from Colombia, Contraloría General, Dirección Nacional de Estadística, Anales de Economía y Estadística (Bogotá), October 25, 1940.

centavos for women, in the cold climates; and in the warm climates, from 40 centavos to 1.20 pesos [2] for men, and from 30 to 80 centavos for women.

The lowest daily wages reported for any of the Departments were 5 centavos with board in the cold climates of Antioquia, Bolívar, and Nariño, and 10 centavos without board in the cold climates of Antioquia and Bolívar; in both cases these were women's rates. The highest daily agricultural wages were those paid to men—1.10 pesos with board in the warm climate of Antioquia and 1.50 pesos without board in the warm climates of Antioquia, Magdalena, and Norte de Santander.

The accompanying table shows the most frequent daily agricultural wages, with and without board, in Colombia in March 1940, by sex and by climatic region.

Current Daily Agricultural Wages in Colombia, March 1940, by Sex and Climatic Region

[Average exchange rate of Colombian peso (100 centavos) in March 1940=about 57 cents]

Departments (principal political divisions)	With board				Without board			
	Cold climate		Warm climate		Cold climate		Warm climate	
	Men over 18 years	Women over 18 years	Men over 18 years	Women over 18 years	Men over 18 years	Women over 18 years	Men over 18 years	Women over 18 years
	Pesos	*Pesos*	*Pesos*	*Pesos*	*Pesos*	*Pesos*	*Pesos*	*Pesos*
Antioquia	0.40	0.25	0.40	0.30	0.60	0.50	0.70	0.45
Atlántico			.60	.25			.75	
Bolívar	.30	.20	.40	.20	.60	.30	.75	.30
Boyacá	.15	.10	.25	.15	.60	.40	.50	.35
Caldas	.45	.30	.45	.30	.75	.45	.80	.80
Cauca	.30	.15	.35	.30	.60	.30	.40	.40
Cundinamarca	.25	.15	.35	.20	.60	.35	.80	.50
Huila	.40	.20	.40	.25	.85	.45	.80	.40
Magdalena	.40	.20	.50	.30	.80	.25	1.20	.50
Nariño	.15	.10	.25	.20	.25	.20	.50	.40
Norte de Santander	.30	.15	.40	.20	.70	.40	.90	.60
Santander	.20	.20	.35	.20	.50	.50	.80	.45
Tolima	.50	.20	.50	.30	.70	.45	1.00	.70
Valle del Cauca	.40	.30	.45	.40	.80	.60	.90	.60

The most frequent daily agricultural wage rates, with board, paid to men are higher in the warm climates in 9 Departments, a difference varying from 5 centavos in 2 Departments to 15 centavos in 1 such geographical division. Such wages for women are higher in 10 Departments, the difference ranging from 5 centavos in 5 Departments to 15 centavos in 1 Department. Wages without board are higher for men in the warm climates in 10 Departments, the difference ranging from 5 centavos in Caldas to 40 centavos in Magdalena, but wages lower by 5 to 20 centavos are paid to men in the warm climates in 3 Departments. For women, higher rates are paid for work in the warm climates in 7 Departments, varying from 10 to 35 centavos, but wages lower by 5 centavos are paid to women in the warm climates in 4 Departments.

[2] Average exchange rate of Colombian peso (100 centavos), March 1940=57.1 cents.

The only instances in which no difference, by sex, is found in current wages occur in rates with and without board in the cold region of Santander, and in wages without board in the warm regions of Caldas and Cauca. In the cold regions, wage differentials because of sex, with board, vary from 5 to 30 centavos, and without board, from 5 to 55 centavos. In the warm climates, the variance on account of sex in wages with board ranges from 5 to 35 centavos, while wages without board vary from 10 to 70 centavos.

Deduction made from wages because of furnishing meals in the cold climates varies from 10 centavos per day in Nariño to 45 centavos in 2 Departments for men, and from 5 centavos in Magdalena to 30 centavos in 3 Departments for women. In the warm climates, allowances for meals vary for men from 5 to 70 centavos, and for women from 10 to 50 centavos.

In the cold regions, where board is included, the highest wage for women, 30 centavos in 2 Departments, is equal to or greater than the most frequent wage for men in 7 Departments; on the other hand, the lowest rate for men—15 centavos in Boyacá and Nariño—is the same as or less than the most frequent rate for women in all the Departments except these 2; where board is not included, the highest of the most frequent daily wage rates for women—60 centavos in Valle del Cauca—is equal to or higher than the most frequent daily wage for men in 7 Departments, whereas the lowest of these rates for men—25 centavos in Nariño—is equaled or exceeded by that for women in all Departments except Nariño.

With respect to the most frequent wage rates in the warm regions, the highest rate for women, where board is furnished—40 centavos in Valle del Cauca—is equal to or greater than that for men in 9 Departments, whereas the lowest rate for men—25 centavos in Boyacá and Nariño—is equaled or exceeded by wage rates for women in 8 Departments. Where board is not included in the wages in the warm climate, the highest rate for women—80 centavos in Caldas—equals or exceeds that for men in 10 Departments, and is exceeded by the wage rates for men in only Magdalena (1.20 pesos), Tolima (1 peso), Norte de Santander and Valle del Cauca (90 centavos); the lowest rate for men, 40 centavos in Cauca, is equaled or exceeded by the rates paid women in all the Departments except Boyacá (35 centavos) and Bolívar (30 centavos).

Trend of Employment and Pay Rolls

SUMMARY OF REPORTS FOR APRIL 1941

Total Nonagricultural Employment

TOTAL civil nonagricultural employment—37,645,000—in April 1941 exceeded the previous high reached in September 1929 by 175,000 and the April 1940 level by 2,763,000. Despite the huge decline in employment in bituminous-coal mining during wage negotiations, there were 418,000 more workers in nonagricultural jobs in April than in March, principally as a result of increases in manufacturing, construction, and trade. These figures do not include CCC enrollees, workers on WPA or NYA projects, nor the armed forces.

Continued expansion of defense production accounted largely for the increase since March of 218,000 workers in manufacturing, while heavy Easter business resulted in an increase of 198,000 workers in wholesale and retail trade establishments. A seasonal increase in private building construction accounted largely for the gain of 129,000 workers in construction. In the finance, service, and miscellaneous group there was an employment increase of 75,000, in the transportation and public utilities group a gain of 66,000, and in the Federal, State, and local government service group an increase of 49,000. The only major group to show a decrease in employment was mining in which 317,000 fewer workers (chiefly bituminous-coal miners) were employed in April than in March.

All major groups except mining showed substantial employment gains over April of last year. In manufacturing the gain was 1,538,000; in construction, 642,000; in trade, 335,000; and in the Federal, State, and local government service, 268,000. Mining employment showed a reduction of 288,000 over the year interval.

Emergency employment decreased 9,000 over the month as a result of the following changes: An increase of 189,000 in the military service and decreases of 142,000 on projects operated by the Work Projects Administration, 40,000 on the out-of-school work program of the National Youth Administration, and 16,000 in the Civilian Conservation Corps.

Industrial and Business Employment

Of the 157 manufacturing industries surveyed, 138 showed gains in employment from March to April and 119 showed increases in pay rolls, most of the increases being larger than seasonal or contraseasonal. Of the 16 nonmanufacturing industries regularly covered, 12 reported employment gains and a like number showed pay-roll increases. Factory employment and pay rolls showed substantial contraseasonal gains from March to April and were at the highest levels on record. The increase in factory wage earners amounted to 218,000, or 2.3 percent, and in weekly factory wages to more than $6,775,000, or 2.7 percent. The usual seasonal changes in April are decreases of 0.1 percent in employment and 0.8 percent in weekly wages. A comparison with April of last year showed that the factory employment level had climbed 18.9 percent and the factory pay-roll level 37.7 percent. Increased hours, overtime payments, and wage increases were responsible for the larger gain in pay rolls than in employment. Key defense industries in which substantial employment gains occurred between March and April were aircraft, shipbuilding, machine tools, engines, and machine-tool accessories. Other manufacturing industries affected by war material orders and showing large employment gains were foundry and machine-shop products, electrical machinery, and steel. Agricultural implements showed an employment gain of 32.6 percent, principally as a result of the settlement of labor disputes, and employment in canneries showed a seasonal gain of 20.5 percent. Among the industries showing declines, partly seasonal, were women's clothing, shoes, hosiery, and confectionery.

Retail trade employment increased 5.6 percent and pay rolls, 5.9 percent, between mid-March and mid-April, bringing the employment index to the highest April level since 1929 and the pay-roll index to the highest April level since 1930. The employment gains in the general merchandising and apparel groups under retail trade (13.3 percent and 19.4 percent, respectively) were much larger than the average April increases, due in part to the fact that heavy Easter trade occurred in the midweek of April this year. Increases among the various retail lines were general, the largest being in shoe stores, variety stores, men's and boys' clothing stores, family clothing stores, women's clothing stores, dry goods and general merchandise stores, and department stores. Wholesale trade firms reported contraseasonal employment and pay-roll gains of 0.6 percent and 1.2 percent, respectively. Among the wholesale lines showing contraseasonal employment gains were dry goods and apparel, farm supplies, furniture and housefurnishings, general merchandise, and groceries. Wholesale lines showing seasonal employment increases included food products,

iron and steel scrap and machinery, heating and plumbing supplies, and electrical goods. In anthracite mines employment was curtailed by 3.0 percent and pay rolls by 42.6 percent, reflecting materially decreased production. In bituminous-coal mines employment fell 76.8 percent and pay rolls 83.5 percent, principally as a result of work stoppages pending the signing of new contracts. Metal mines reported larger than seasonal gains of 3.1 percent in employment and 5.8 percent in pay rolls, reflecting defense needs, and bringing the indexes of employment and pay rolls to the highest points since October 1937. Quarries and nonmetallic mines increased employment by 8.8 percent, reflecting a resumption of operations at this season. Laundries reported a larger-than-seasonal employment gain of 2.9 percent and dyeing and cleaning plants a larger-than-seasonal employment increase of 12.4 percent.

Employment in private building construction increased seasonally by 11.1 percent from March to April and showed a gain of 33.6 percent from April of last year. Large employment gains over the month interval were registered in seven of the nine geographic divisions. The East South Central and the Pacific States were the only groups to show a net employment reduction. General building contractors as a group increased employment 13.8 percent, while the special trades group increased employment by 8.7 percent. Of the 15 special building trades surveyed, 13 reported increased employment and 2 reported fewer workers on their pay rolls. The special trades which showed increased employment were brick and stone masonry, excavating, painting and decorating, ornamental iron contracting, tile and terrazzo contracting, carpentering, building insulation, roofing and sheet-metal work, wood flooring, plastering, plumbing and heating, glazing, and electrical contracting. The trades showing decreases were structural steel erection and elevator installation and repair.

A preliminary report of the Interstate Commerce Commission for class I steam railroads show an employment gain of 2.9 percent between March and April, the total number employed in April being 1,080,896. Corresponding pay-roll figures for April were not available when this report was prepared. For March they were $176,538,586, a gain of $17,714,574 since February.

Hours and earnings.—The average hours worked per week by manufacturing wage earners were 40.0 in April, a decrease of 1.1 percent since March. The corresponding average hourly earnings were 70.8 cents, a gain of 1.7 percent from the preceding month. The average weekly earnings of factory wage earners (both full- and part-time combined) were $29.10, an increase of 0.5 percent since March. Of the 16 nonmanufacturing industries regularly surveyed, 11 reported increases in average weekly earnings. Of the 14 nonmanufacturing

industries for which man-hours are available, 8 showed gains in average hours worked per week and 7 reported increases in average hourly earnings.

TABLE 1.—*Employment, Pay Rolls, and Earnings in All Manufacturing Industries Combined and in Nonmanufacturing Industries, April 1941 (Preliminary Figures)*

Industry	Employment			Pay rolls			Average weekly earnings		
	Index, April 1941	Percentage change from—		Index, April 1941	Percentage change from—		Average in April 1941	Percentage change from—	
		March 1941	April 1940		March 1941	April 1940		March 1941	April 1940
All manufacturing industries combined [1]	(*1923–25 = 100*) 122.7	+2.3	+18.9	(*1923–25 = 100*) 134.8	+2.7	+37.7	$29.10	+0.5	+15.8
Class I steam railroads [2]	105.9	+2.9	+9.7	[3]	[3]	[3]	[3]	[3]	[3]
Coal mining:	(*1929 = 100*)			(*1929 = 100*)					
Anthracite [4]	48.7	−3.0	−4.8	24.3	−42.6	−32.9	16.43	−40.9	−29.5
Bituminous [4]	21.1	−76.8	−75.5	15.5	−83.5	−78.6	19.59	−29.1	−12.7
Metalliferous mining [5]	76.6	+3.1	+13.2	76.9	+5.8	+21.3	31.66	+2.6	+7.2
Quarrying and nonmetallic mining	48.1	+8.8	+8.0	47.0	+16.5	+23.4	24.46	+7.1	+14.2
Crude-petroleum production	60.7	+.8	−3.9	57.1	+1.8	−3.1	34.59	+1.0	+.9
Public utilities:									
Telephone and telegraph [6]	83.0	+1.5	+8.2	108.1	+1.6	+9.5	[7] 31.97	+.1	+1.2
Electric light and power [6]	91.9	+1.8	+2.1	107.8	+1.6	+4.4	[7] 35.75	−.2	+2.3
Street railways and busses [8]	68.2	[9]	−.2	71.8	−1.0	+3.8	[7] 34.27	−.9	+4.0
Trade:									
Wholesale [10]	92.3	+.6	+3.3	83.0	+1.2	+7.2	[7] 31.37	+.6	+3.8
Retail [6]	97.7	+5.6	+8.8	91.3	+5.9	+10.9	[7] 21.55	+.2	+2.0
Hotels (year-round) [4 11]	95.1	+1.0	+2.6	86.7	+1.2	+4.2	[7] 15.70	+.2	+1.5
Laundries [4]	105.5	+2.9	+8.5	95.5	+5.1	+11.5	18.75	+2.1	+2.8
Dyeing and cleaning [4]	117.4	+12.4	+12.4	98.1	+27.2	+23.2	23.00	+13.1	+9.6
Brokerage	[3]	−.9	−14.0	[3]	+.7	−14.2	[7] 38.46	+1.6	+.3
Insurance	[3]	+.3	+1.5	[3]	−.4	+2.0	[7] 36.98	−.7	+.5
Building construction	[3]	+11.1	+33.6	[3]	+15.5	+47.6	33.96	+4.0	+10.5
Water transportation [12]	80.1	+.8	−1.4	[3]	[3]	[3]	[3]	[3]	[3]

[1] Indexes adjusted to preliminary 1939 Census of Manufactures. See table 9 in December 1940 "Employment and Pay Rolls" for comparable series back to January 1919.
[2] Preliminary. Source—Interstate Commerce Commission.
[3] Not available.
[4] Indexes adjusted to 1935 census. Comparable series back to January 1929 presented in January 1938 issue of the pamphlet, "Employment and Pay Rolls." See also table 7 of October 1940 pamphlet for revised figures for anthracite mining February to September 1940 inclusive.
[5] See table 7 of February 1941 pamphlet for revised figures January 1938 to January 1941.
[6] Retail-trade indexes adjusted to 1935 census and public utility indexes to 1937 census. Not comparable with indexes published in pamphlets prior to January 1940 or in the Monthly Labor Review prior to April 1940. Revised series available upon request.
[7] Average weekly earnings not strictly comparable with figures published in issues of the pamphlet dated earlier than January 1938, or in the Monthly Labor Review dated earlier than April 1938 (except for the January figures appearing in the March issue), as they now exclude corporation officers, executives, and other employees whose duties are mainly supervisory.
[8] Covers street railways and trolley and motorbus operations of subsidiary, affiliated, and successor companies.
[9] Less than 1/10 of 1 percent.
[10] Indexes adjusted to 1933 census. Comparable series in November 1934 and subsequent issues of pamphlet or February 1935 and subsequent issues of Monthly Labor Review.
[11] Cash payments only; the additional value of board, room, and tips cannot be computed.
[12] Based on estimates prepared by the United States Maritime Commission.

More factory workers were affected by general wage-rate increases between mid-March and mid-April than during any month since April 1937. These increases averaged 9.6 percent and affected more than 813,000 wage earners in 1,222 manufacturing establishments out of a reporting sample of 33,850 plants employing 6,954,741 workers.

Among the industries in which substantial numbers of workers received pay raises were steel, cotton goods, aircraft, woolen and worsted goods, electrical machinery, silk and rayon goods, petroleum refining, and foundry and machine shops. The wage rate changes reported for nonmanufacturing industries affected 23,549 workers, about half of whom were metal miners. As the Bureau's survey does not cover all manufacturing establishments in an industry, and furthermore as some firms may have failed to report wage changes, these figures should not be construed as representing the total number of wage changes occurring in manufacturing and nonmanufacturing industries.

Employment and pay-roll indexes and average weekly earnings for April 1941 are given in table 1 for all manufacturing industries combined and selected nonmanufacturing industries, for water transportation and for class I railroads. Percentage changes over the month and year intervals are also given.

Public Employment

Total employment on construction projects financed from appropriations to regular Federal agencies was expanded by 39,000 during the month ending April 15. On defense construction, sizable gains on naval vessel, airport, and residential building construction and decreased employment on troop cantonments resulted in a net loss of 5,000. Nondefense construction, with seasonal gains on Federal-aid roads, dredging, dike, and revetment and miscellaneous projects showed an employment increase of 44,000 over the month. Defense and nondefense projects together furnished employment to approximately 890,000 workers in the month ending April 15. Pay roll disbursements of $115,910,000 were $5,915,000 more than in the preceding month.

Contractors on low-rent projects of the United States Housing Authority added 2,000 building-trades workers to their pay rolls in the month ending April 15. Approximately 6,200 men were working on defense housing projects, a gain of 500 from the preceding month, and 32,700 were employed on nondefense housing, an increase of 1,500 over March. Total wage payments of $3,893,000 were $408,000 more than in the preceding month.

Employment on construction projects financed from Public Works Administration funds showed a slight decline in the month ending April 15. Pay-roll disbursements of $1,338,000 to the 11,000 men employed were $22,000 less than in March.

Further employment gains were reported in the month ending April 15 on construction projects financed by the Reconstruction Finance Corporation. An increase of 2,200 on defense construction lifted the total to 6,100 and 200 additional workers on nondefense

projects brought that total up to 2,300. Wage payments to the 8,400 men employed on both types of work amounted to $1,135,000.

Increasing employment in manufacturing and trade in April again lightened the relief load by a sizable amount. The number of persons at work on relief projects operated by the Work Projects Administration fell to 1,566,000 in April, a decrease of 142,000 from March. Defense projects employed 426,000 persons and nondefense projects 1,140,000. Pay-roll disbursements on all projects totaled $92,326,000. Employment on Federal agency projects financed by the Work Projects Administration showed a decrease of 1,000 from March to April. The 58,000 persons employed were paid $2,696,000.

The National Youth Administration reported an increase of 7,000 in the number of persons employed on the student-work program and a decrease of 40,000 on the out-of-school work program. Wage payments to the 480,000 persons on the student program amounted to $3,369,000 and to the 425,000 on the out-of-school program the total was $8,487,000.

The number of persons at work in camps of the Civilian Conservation Corps declined 16,000 in April. Of the 266,600 persons on the pay roll, 231,800 were enrollees; 1,500, educational advisers; 100, nurses; and 33,200, supervisory and technical employees. Pay rolls of $12,339,000 were $492,000 less than in March.

In the regular services of the Federal Government, large increases were reported in the executive and military branches, while employment in the judicial and legislative branches showed very slight decreases. Of the 1,251,000 employees in the executive service, 173,000 were working in the District of Columbia and 1,078,000 outside the District. Force-account employees (employees on the pay roll of the United States Government who are engaged on construction projects, and whose period of employment terminates as the project is completed) were 11 percent of the total number of employees in the executive service.

Employment on State-financed road projects increased seasonally in April. Of the 146,000 on the pay roll, 35,000 were engaged in the construction of new roads and 111,000 on maintenance. Pay-roll disbursements of $11,812,000 were $1,630,000 more than in March.

A summary of employment and pay-roll data in the regular Federal services and on projects financed wholly or partially from Federal funds is given in table 2.

TABLE 2.—*Summary of Employment and Pay Rolls in Regular Federal Services and on Projects Financed Wholly or Partially from Federal Funds, April 1941 (Preliminary Figures)*

Class	Employment			Pay rolls		
	April 1941	March 1941	Percentage change	April 1941	March 1941	Percentage change
Federal services:						
Executive [1]	1,251,283	1,202,348	+4.1	$189,213,464	$184,244,306	+2.7
Judicial	2,505	2,509	(2)	641,009	640,485	+.1
Legislative	6,015	6,033	−.3	1,320,148	1,318,229	+.1
Military	1,532,132	1,343,316	+14.1	91,805,598	77,907,387	+17.8
Construction projects:						
Financed by regular Federal appropriations	890,050	850,679	+4.6	115,909,892	109,995,226	+5.4
Defense	703,802	709,226	−.8	97,822,631	95,253,528	+2.7
Other	186,248	141,453	+31.7	18,087,261	14,741,698	+22.7
USHA low-rent housing	38,970	36,989	+5.4	3,892,911	3,485,089	+11.7
Defense	6,230	5,701	+9.3	603,642	524,047	+15.2
Other	32,740	31,288	+4.6	3,289,269	2,961,042	+11.1
Financed by PWA [3]	10,997	11,391	−3.5	1,338,312	1,360,442	−1.6
Financed by RFC [4]	8,403	6,011	+39.8	1,135,134	772,227	+47.0
Defense	6,127	3,968	+54.4	861,486	550,132	+56.6
Other	2,276	2,043	+11.4	273,648	222,095	+23.2
Federal agency projects financed by Work Projects Administration	57,827	58,950	−1.9	2,696,470	2,647,479	+1.9
Defense	27,256	28,364	−3.9	1,273,492	1,202,492	+5.9
Other	30,571	30,586	(2)	1,422,978	1,444,987	−1.5
Projects operated by WPA	1,566,325	1,708,658	−8.3	92,325,962	95,910,162	−3.7
Defense	426,400	455,524	−6.4	(5)	(5)	
Other	1,139,925	1,253,134	−9.0	(5)	(5)	
National Youth Administration:						
Student work program	480,419	473,417	+1.5	3,369,480	3,300,411	+2.1
Out-of-school work program	425,302	465,283	−8.6	8,486,681	9,005,825	−5.8
Civilian Conservation Corps	266,645	282,896	−5.7	12,339,002	12,830,524	−3.8

[1] Includes force-account and supervisory and technical employees shown under other classifications to the extent of 176,999 employees and pay-roll disbursements of $26,447,715 for April 1941, and 166,561 employees and pay-roll disbursements of $22,752,260 for March 1941.

[2] Decrease less than 1/10 of 1 percent.

[3] Data covering PWA projects financed from National Industrial Recovery Act funds, Emergency Relief Appropriation Acts of 1935, 1936, 1937 funds, and Public Works Administration Appropriation Act of 1938 funds are included. These data are not shown under projects financed by the Work Projects Administration. Includes 3,198 wage earners and $402,329 pay roll for April 1941; 3,039 wage earners and $334,173 pay roll for March 1941, covering Public Works Administration Projects financed from Emergency Relief Appropriation Acts of 1935, 1936, and 1937 funds. Includes 7,488 wage earners and $914,006 pay roll for April 1941financed from funds provided by the Public Works Administration Appropriation Act of 1938.

[4] Includes 434 employees and pay-roll disbursements of $67,835 for April 1941; 318 employees and pay-roll disbursements of $27,257 for March 1941 on projects financed by the RFC Mortgage Co.

[5] Pay-roll data not available.

DETAILED REPORTS FOR MARCH 1941

A MONTHLY report on employment and pay rolls is published as a separate pamphlet by the Bureau of Labor Statistics. This gives detailed data regarding employment, pay rolls, working hours, and earnings for the current month for industrial and business establishments and for the various forms of public employment. This pamphlet is distributed free upon request. Its principal contents for the month of March 1941, insofar as industrial and business employment is concerned, are reproduced in this section of the Monthly Labor Review.

Estimates of Nonagricultural Employment

The estimates of "Total civil nonagricultural employment," given on the first line of table 1, represent the total number of persons engaged in gainful work in the United States in nonagricultural industries, excluding military and naval personnel, persons employed on WPA or NYA projects, and enrollees in CCC camps. The

series described as "Employees in nonagricultural establishments" also excludes proprietors and firm members, self-employed persons, casual workers, and persons in domestic service. The estimates for "Employees in nonagricultural establishments" are shown separately for each of seven major industry groups. Tables giving figures for each group, by months, for the period from January 1929 to date are available on request.

The figures represent the number of persons working at any time during the week ending nearest the middle of each month. The totals for the United States have been adjusted to conform to the figures shown by the 1930 Census of Occupations for the number of nonagricultural "gainful workers" less the number shown to have been unemployed for 1 week or more at the time of the census. Separate estimates for "employees in nonagricultural establishments" are shown in table 2 for each of the 48 States and the District of Columbia for February and March 1941 and March 1940. Tables showing monthly figures for each State from January 1938 to date are available on request. Because the State figures do not include employees on merchant vessels, and because of certain adjustments in the United States estimates which have not been made on a State basis, the total of the State estimates will not agree exactly with the figure for the United States as a whole.

These estimates are based in large part on industrial censuses and on regular reports of employers to the United States Bureau of Labor Statistics and to other Government agencies, such as the Interstate Commerce Commission. Data derived from employers' quarterly reports in connection with "old age and survivors' insurance," and employers' monthly reports in connection with unemployment compensation have been used extensively as a check on estimates derived from other sources, and in some industries they have provided the most reliable information available.

TABLE 1.—*Estimates of Total Nonagricultural Employment by Major Groups*

[In thousands]

Industry	March 1941 (preliminary)	February 1941	Change February to March 1941	March 1940	Change March 1940 to March 1941
Total civil nonagricultural employment [1]	37, 222	36, 928	+294	34, 852	+2, 370
Employees in nonagricultural establishments [2]	31, 079	30, 785	+294	28, 709	+2, 370
Manufacturing	11, 151	10, 982	+169	9, 926	+1, 225
Mining	862	854	+8	849	+13
Construction	1, 650	1, 678	−28	991	+659
Transportation and public utilities	3, 054	3, 028	+26	2, 940	+114
Trade	6, 242	6, 173	+69	6, 201	+41
Finance, service, and miscellaneous	4, 184	4, 164	+20	4, 100	+84
Federal, State, and local government					
Civil employees	3, 936	3, 906	+30	3, 702	+234
Military and naval forces [3]	1, 343	1, 145	+198	457	+886

[1] Revised series—Excludes military and naval forces. Also excludes employees on WPA and NYA projects as well as enrollees in CCC camps. Includes proprietors, firm members, self-employed persons, casual workers, and domestic servants.

[2] Excludes all of the groups omitted from "total civil nonagricultural employment" as well as proprietors, firm members, self-employed persons, casual workers, and domestic servants.

[3] Not included in totals shown above. Includes members of the National Guard inducted into the Federal service by act of Congress.

TABLE 2.—*Estimated Number of Employees in Nonagricultural Establishments, by States*

[Excludes proprietors, firm members, self-employed persons, casual workers, domestic workers, the armed forces of the United States, and employees on merchant vessels]

[In thousands]

States	March 1941 (preliminary)	February 1941	Change February to March 1941		March 1940	Change March 1940 to March 1941	
			Number	Percentage		Number	Percentage
New England	**2,725**	**2,686**	**+39**	**+1.4**	**2,409**	**+316**	**+13.0**
Maine	187	187	0	+.4	178	+9	+5.1
New Hampshire	134	133	+1	+.3	120	+14	+11.1
Vermont	72	71	+1	+.4	69	+3	+3.7
Massachusetts	1,433	1,412	+21	+1.5	1,270	+163	+12.8
Rhode Island	254	250	+4	+1.4	217	+37	+16.8
Connecticut	645	633	+12	+1.8	555	+90	+16.1
Middle Atlantic	**7,980**	**7,889**	**+91**	**+1.1**	**7,501**	**+479**	**+6.4**
New York	3,955	3,914	+41	+1.0	3,801	+154	+4.1
New Jersey	1,224	1,207	+17	+1.4	1,108	+116	+10.4
Pennsylvania	2,801	2,768	+33	+1.2	2,592	+209	+8.0
East North Central	**7,216**	**7,110**	**+106**	**+1.5**	**6,563**	**+653**	**+10.0**
Ohio	1,888	1,857	+31	+1.7	1,709	+179	+10.5
Indiana	839	822	+17	+2.0	739	+100	+13.5
Illinois	2,336	2,306	+30	+1.3	2,167	+169	+7.8
Michigan	1,496	1,477	+19	+1.3	1,340	+156	+11.7
Wisconsin	657	648	+9	+1.4	608	+49	+8.0
West North Central	**2,360**	**2,334**	**+26**	**+1.2**	**2,251**	**+109**	**+4.9**
Minnesota	514	508	+6	+1.3	493	+21	+4.4
Iowa	399	395	+4	+1.0	383	+16	+4.0
Missouri	797	788	+9	+1.1	756	+41	+5.5
North Dakota	72	72	0	+1.0	71	+1	+1.4
South Dakota	79	79	0	+.2	78	+1	+2.2
Nebraska	193	191	+2	+1.1	190	+3	+1.9
Kansas	306	301	+5	+1.4	280	+26	+9.2
South Atlantic	**3,849**	**3,816**	**+33**	**+.9**	**3,403**	**+446**	**+13.1**
Delaware	71	70	+1	+1.4	66	+5	+7.5
Maryland	567	556	+11	+2.0	482	+85	+17.7
District of Columbia	374	366	+8	+2.3	325	+49	+15.3
Virginia	554	550	+4	+.8	477	+77	+16.2
West Virginia	383	378	+5	+1.6	362	+21	+5.8
North Carolina	637	633	+4	+.7	572	+65	+11.4
South Carolina	316	315	+1	+.4	275	+41	+14.9
Georgia	527	519	+8	+1.4	469	+58	+12.3
Florida	420	429	−9	−2.2	375	+45	+11.9
East South Central	**1,422**	**1,409**	**+13**	**+1.0**	**1,313**	**+109**	**+8.3**
Kentucky	376	375	+1	+.3	352	+24	+6.8
Tennessee	469	463	+6	+1.4	428	+41	+9.7
Alabama	392	387	+5	+1.3	355	+37	+10.5
Mississippi	185	184	+1	+.6	178	+7	+3.9
West South Central	**1,978**	**1,972**	**+6**	**+.3**	**1,785**	**+193**	**+10.8**
Arkansas	186	184	+2	+.9	175	+11	+6.4
Louisiana	407	405	+2	+.6	363	+44	+12.3
Oklahoma	289	291	−2	−.7	282	+7	+2.3
Texas	1,096	1,092	+4	+.3	965	+131	+13.6
Mountain	**756**	**748**	**+8**	**+1.3**	**729**	**+27**	**+3.8**
Montana	107	107	0	+.6	105	+2	+1.7
Idaho	81	80	+1	+1.9	78	+3	+4.5
Wyoming	50	49	+1	+1.4	47	+3	+5.7
Colorado	218	214	+4	+1.7	211	+7	+3.4
New Mexico	67	67	0	(1)	68	−1	−1.5
Arizona	93	94	−1	−.2	89	+4	+5.3
Utah	107	105	+2	+2.4	101	+6	+6.1
Nevada	33	32	+1	+2.1	30	+3	+7.5
Pacific	**2,518**	**2,494**	**+24**	**+1.0**	**2,288**	**+230**	**+10.1**
Washington	446	442	+4	+1.0	397	+49	+12.5
Oregon	241	236	+5	+2.2	222	+19	+8.7
California	1,831	1,816	+15	+.8	1,669	+162	+9.7

[1] Less than 1/10 of 1 percent.

Industrial and Business Employment

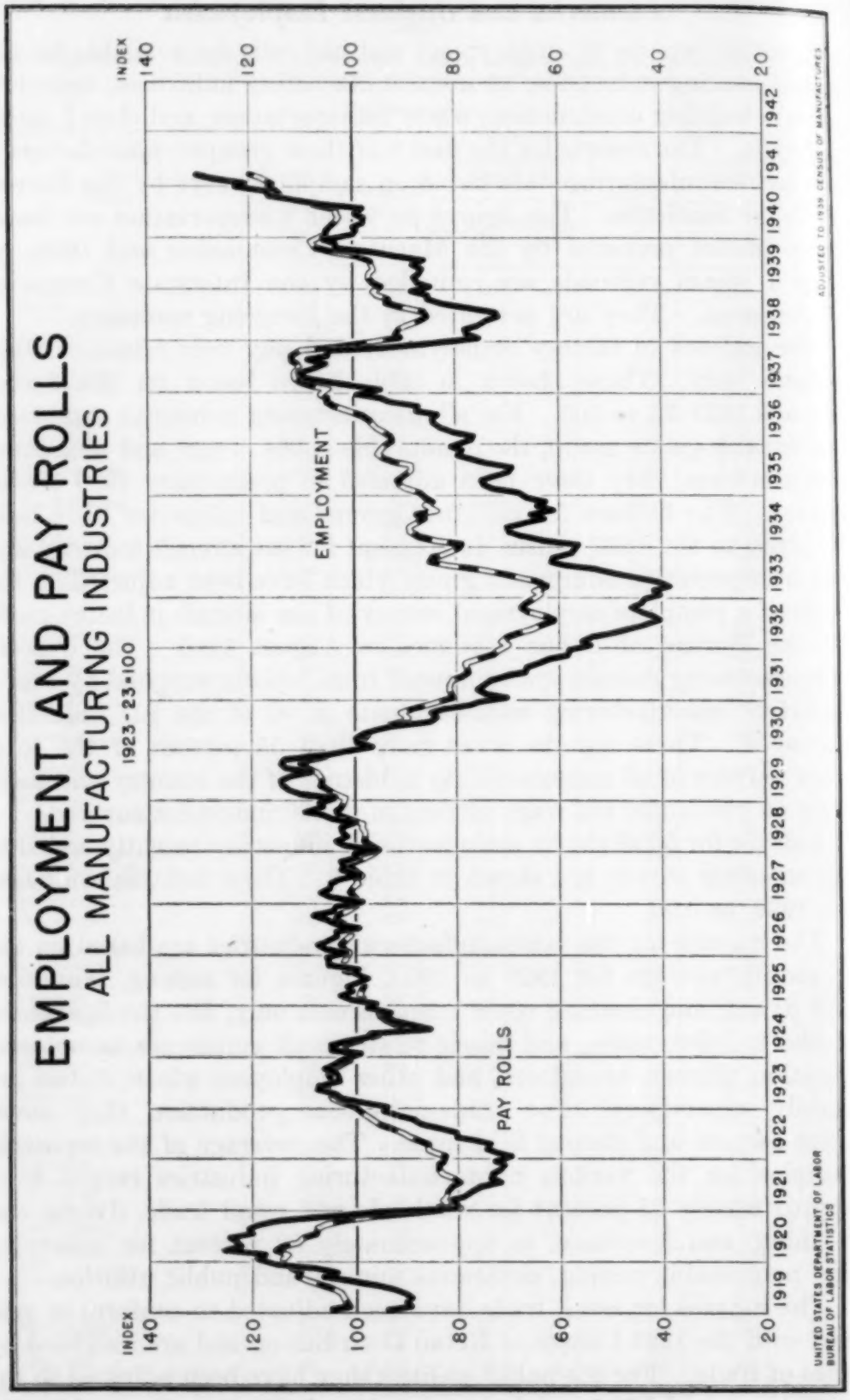
Monthly reports on employment and pay rolls are available for 157 manufacturing industries; 16 nonmanufacturing industries, including private building construction; water transportation; and class I steam railroads. The reports for the first 2 of these groups—manufacturing and nonmanufacturing—are based on sample surveys by the Bureau of Labor Statistics. The figures on water transportation are based on estimates prepared by the Maritime Commission and those on class I steam railroads are compiled by the Interstate Commerce Commission. They are presented in the foregoing summary.

The indexes of factory employment and pay rolls relate to wage earners only. Those shown in table 3 are based on the 3-year average 1923–25 as 100. For all manufacturing industries combined, the durable-goods group, the nondurable-goods group, and aluminum manufactures, they have been adjusted to preliminary 1939 census figures. The indexes for all other groups and industries have been adjusted to the 1937 census data except for the aircraft industry and the transportation equipment group which have been adjusted on the basis of a complete employment survey of the aircraft industry made by the Bureau of Labor Statistics in August 1940. The over-all manufacturing indexes are computed from reports supplied by representative manufacturing establishments in 90 of the 157 industries surveyed. These reports cover more than 55 percent of the total wage earners in all manufacturing industries of the country and more than 65 percent of the wage earners in the 90 industries covered.

Indexes for 55 of the 67 manufacturing industries recently added to the monthly survey are shown in table 6. These indexes are based on 1939 as 100.

The indexes for the nonmanufacturing industries are based on the 12-month average for 1929 as 100. Figures for mining, laundries, and dyeing and cleaning cover wage earners only, but the figures for public utilities, trade, and hotels relate to all employees except corporation officers, executives, and other employees whose duties are mainly supervisory. For crude-petroleum production they cover wage earners and clerical field force. The coverage of the reporting samples for the various nonmanufacturing industries ranges from approximately 25 percent for wholesale and retail trade, dyeing and cleaning, and insurance, to approximately 80 percent for quarrying and nonmetallic mining, anthracite mining, and public utilities.

The indexes for retail trade have been adjusted to conform in general with the 1935 Census of Retail Distribution and are weighted by lines of trade. For the public utilities they have been adjusted to the 1937 Census of Electrical Industries, for wholesale trade to the 1933 census, and for coal mining, year-round hotels, laundries, and dyeing and cleaning to the 1935 censuses.



Data for both manufacturing and nonmanufacturing industries are based on reports of the number of employees and the amount of pay rolls for the pay period ending nearest the 15th of the month.

The average weekly earnings shown in table 3 are computed by dividing the total weekly pay rolls in the reporting establishments by the total number of full- and part-time employees reported. As not all reporting establishments supply man-hours, average hours worked per week and average hourly earnings are necessarily based on data furnished by a smaller number of reporting firms. The size and composition of the reporting sample vary slightly from month to month. Therefore, the average hours per week, average hourly earnings, and average weekly earnings shown may not be strictly comparable from month to month. The sample, however, is believed to be sufficiently adequate in virtually all instances to indicate the general movement of earnings and hours over the period shown. The changes from the preceding month, expressed as percentages, are based on identical lists of firms for the 2 months, but the changes from March 1940 are computed from chain indexes based on the month-to-month percentage changes.

EMPLOYMENT AND PAY-ROLL INDEXES, AVERAGE HOURS, AND AVERAGE EARNINGS

The indexes of employment and pay rolls as well as average hours worked per week, average hourly earnings, and average weekly earnings in manufacturing and nonmanufacturing industries for January, February, and March 1941, where available, are presented in table 3. The January and February figures, where given, may differ in some instances from those previously published because of revisions necessitated primarily by the inclusion of late reports. Revised figures for aluminum manufactures are given in table 4 for the months from January 1935 to February 1941, inclusive. Indexes of employment and pay rolls are given in table 5 for 55 of the 67 newly added manufacturing industries for the months of January, February, and March 1941. These indexes are based on 1939 as 100 and are available in mimeographed form for the period from January 1939 to January 1941, inclusive.

In table 6 indexes of employment and pay rolls are given for all manufacturing industries combined, for the durable- and nondurable-goods groups of manufacturing industries, and for each of 13 nonmanufacturing industries, by months, from March 1940 to March 1941, inclusive. The indexes for all manufacturing industries combined, the durable-goods group, and the nondurable-goods group have been adjusted to preliminary 1939 census figures. Comparable indexes for all available months and years back to January 1919 are given in tables 9, 10, and 11 of the December 1940 issue of the pamphlet, "Employment and Pay Rolls." The chart on page 1560 indicates the trend of factory employment and pay rolls from January 1919 to March 1941.

TABLE 3.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries*

MANUFACTURING

[Indexes are based on 3-year average, 1923–25=100. For "all manufacturing," "durable goods," "nondurable goods," and "aluminum manufactures," they have been adjusted to preliminary 1939 census figures. Except as otherwise noted, the indexes for all other manufacturing groups and industries have been adjusted to 1937 census figures and are not comparable to indexes published in pamphlets prior to August 1939. Comparable series available upon request]

Industry	Employment index			Pay-roll index			Average weekly earnings [1]			Average hours worked per week [1]			Average hourly earnings [1]		
	March 1941	February 1941	January 1941	March 1941	February 1941	January 1941	March 1941	February 1941	January 1941	March 1941	February 1941	January 1941	March 1941	February 1941	January 1941
													Cents	*Cents*	*Cents*
All manufacturing [2]	**119.9**	**117.8**	**115.5**	**131.2**	**126.9**	**120.7**	**$29.11**	**$28.58**	**$27.71**	**40.4**	**40.0**	**39.0**	**69.7**	**69.2**	**68.9**
Durable goods [2]	**123.7**	**121.0**	**118.3**	**144.5**	**139.3**	**132.0**	**33.50**	**32.93**	**31.90**	**42.0**	**41.6**	**40.6**	**76.8**	**76.2**	**75.8**
Nondurable goods [2]	**116.3**	**114.7**	**112.7**	**116.3**	**112.9**	**108.1**	**23.63**	**23.22**	**22.64**	**38.8**	**38.3**	**37.3**	**62.4**	**62.1**	**62.0**
Durable goods															
Iron and steel and their products, not including machinery	**127.2**	**125.0**	**122.2**	**141.1**	**136.9**	**130.8**	**32.71**	**32.23**	**31.46**	**41.0**	**40.7**	**39.8**	**79.5**	**79.1**	**78.6**
Blast furnaces, steel works, and rolling mills	135.0	133.3	131.3	149.0	145.4	139.9	34.94	34.51	33.66	40.1	40.0	39.1	87.3	86.6	86.1
Bolts, nuts, washers, and rivets	150.5	146.0	138.9	199.4	192.7	197.5	31.87	31.87	29.58	44.0	44.3	41.9	72.4	71.9	70.6
Cast-iron pipe	90.5	89.3	87.6	99.2	97.4	93.3	26.22	26.07	25.42	41.5	41.3	40.5	62.8	62.9	62.6
Cutlery (not including silver and plated cutlery) and edge tools	112.5	109.4	107.7	117.5	111.4	106.9	27.33	26.66	25.90	41.7	41.0	40.5	66.6	66.1	65.2
Forgings, iron and steel	97.4	94.5	91.4	137.6	130.2	124.4	38.23	37.29	36.75	45.9	45.2	45.0	83.4	82.7	81.8
Hardware	117.1	114.9	112.8	138.1	134.8	130.4	28.95	28.84	28.30	42.0	41.9	40.8	69.0	68.9	69.5
Plumbers' supplies	100.6	99.3	97.9	99.5	95.9	91.0	28.57	27.92	26.86	39.8	38.8	38.1	71.8	72.1	70.5
Stamped and enameled ware	206.1	201.3	190.0	240.0	232.5	214.2	27.51	27.36	26.69	40.5	40.5	39.6	67.6	67.0	67.2
Steam and hot-water heating apparatus and steam fittings	107.3	105.9	102.7	112.1	109.8	105.3	31.49	31.28	30.98	42.6	42.6	42.5	74.2	73.6	73.2
Stoves	103.9	99.2	94.5	103.3	94.1	87.1	28.25	26.79	26.07	40.3	39.1	38.7	69.7	68.8	67.8
Structural and ornamental metalwork	97.2	95.9	93.5	97.1	93.8	89.4	32.35	31.67	31.01	42.9	42.2	41.8	75.6	75.0	74.3
Tin cans and other tinware [3]	107.3	104.1	101.8	123.7	117.2	116.3	25.91	25.31	25.63	40.0	39.4	39.8	64.8	64.7	64.8
Tools (not including edge tools, machine tools, files, and saws) [3]	130.1	126.2	121.1	160.5	153.3	141.1	31.36	30.86	29.49	46.4	46.1	44.7	67.7	67.1	66.2
Wirework	209.7	207.8	205.5	256.4	252.5	237.7	29.89	29.71	28.27	41.7	41.7	39.7	72.1	71.3	71.2
Machinery, not including transportation equipment	**147.7**	**143.5**	**139.8**	**186.2**	**176.9**	**167.5**	**34.98**	**34.28**	**33.35**	**44.9**	**44.2**	**43.2**	**77.8**	**77.1**	**76.8**
Agricultural implements (including tractors) [4]	132.6	144.2	149.6	162.0	174.2	180.9	33.54	33.13	33.25	41.0	40.6	40.6	82.0	81.8	82.1
Cash registers, adding machines, and calculating machines	146.3	140.3	136.1	179.4	166.3	151.6	38.25	36.99	34.78	44.3	43.4	41.4	87.3	86.2	84.6
Electrical machinery, apparatus, and supplies	141.5	136.4	129.4	185.9	175.7	162.7	34.46	33.87	33.00	44.3	43.8	42.8	78.0	77.6	77.3

Engines, turbines, water wheels, and windmills	247.1	236.7	223.5	376.4	345.7	331.7	40.14	38.46	39.09	46.0	45.1	45.3	87.4	85.4	86.6
Foundry and machine-shop products	123.6	120.0	117.4	143.6	136.1	128.7	34.39	33.51	32.51	44.7	44.0	42.9	76.9	76.2	75.7
Machine tools	307.1	297.2	285.8	462.9	448.7	414.5	41.73	41.80	40.15	51.9	51.9	50.4	80.1	80.2	79.7
Radios and phonographs	149.1	144.8	147.5	157.2	146.4	144.9	25.79	24.80	24.08	40.2	38.9	38.2	64.3	64.0	63.2
Textile machinery and parts	96.2	92.9	89.3	110.3	105.2	97.9	31.77	31.36	30.13	45.9	45.6	44.6	69.3	69.0	67.7
Typewriters and parts	133.6	108.5	130.8	159.2	122.0	141.0	29.20	27.58	26.40	42.3	40.9	39.1	69.1	67.4	67.5
Transportation equipment [5]	**161.0**	**157.0**	**152.6**	**197.0**	**190.7**	**176.2**	**38.80**	**38.44**	**36.57**	**42.3**	**42.1**	**40.4**	**92.1**	**91.8**	**91.1**
Aircraft [5]	5,563.7	5,344.0	5,037.7	6,678.3	6,440.6	5,919.7	35.02	35.14	34.13	45.2	45.5	44.7	78.3	78.4	77.6
Automobiles [6]	131.3	129.9	128.3	162.8	159.1	147.5	40.64	40.05	37.61	41.4	41.1	39.0	98.4	97.5	96.6
Cars, electric- and steam-railroad	70.9	68.9	69.3	65.6	56.9	64.3	29.42	30.88	29.57	37.7	39.5	38.5	78.0	78.1	76.8
Locomotives	55.8	53.1	49.4	64.0	60.7	55.0	35.17	34.95	34.13	43.3	43.1	42.5	81.2	81.1	80.3
Shipbuilding	272.0	256.3	240.0	365.0	338.1	307.6	39.58	38.91	37.81	44.2	42.9	42.1	89.3	90.3	89.4
Nonferrous metals and their products	**136.9**	**134.7**	**131.1**	**155.0**	**151.2**	**146.0**	**31.49**	**31.02**	**30.71**	**42.1**	**41.8**	**41.4**	**74.8**	**74.0**	**74.0**
Aluminum manufactures [6]	223.1	225.2	225.4	257.0	285.2	280.6	28.71	31.73	31.16	38.0	42.0	41.4	75.6	75.5	75.3
Brass, bronze, and copper products	180.5	175.9	171.5	236.7	224.2	220.1	36.45	35.16	35.28	44.4	43.6	44.0	82.2	80.9	80.7
Clocks and watches and time-recording devices	111.9	109.1	106.3	129.2	124.8	115.0	25.51	25.27	23.90	41.8	41.2	38.9	61.2	61.4	61.4
Jewelry	104.1	102.2	96.2	93.9	89.4	81.9	24.14	23.54	22.92	40.9	39.8	38.5	59.3	58.8	58.9
Lighting equipment	111.9	111.3	107.9	105.4	104.8	98.9	28.83	28.78	28.19	40.5	40.4	39.3	71.1	71.2	71.7
Silverware and plated ware	79.8	78.4	74.7	82.4	77.0	70.8	29.81	28.35	27.37	44.3	42.7	41.4	68.0	67.0	66.6
Smelting and refining—copper, lead, and zinc	100.6	99.8	97.9	105.7	104.5	101.5	29.60	29.51	29.21	39.1	38.9	38.7	75.8	75.9	75.5
Lumber and allied products	**72.7**	**72.0**	**71.3**	**72.8**	**71.2**	**68.1**	**21.69**	**21.41**	**20.72**	**39.6**	**39.7**	**38.9**	**54.1**	**53.6**	**52.9**
Furniture	96.7	95.8	93.7	93.9	90.0	84.2	23.03	22.32	21.42	40.8	40.0	39.0	56.5	56.0	55.2
Lumber:															
Millwork	69.7	70.0	70.4	57.7	58.2	57.7	22.78	22.81	22.51	40.4	41.3	40.5	56.2	55.0	55.4
Sawmills	63.8	62.9	62.5	62.7	61.6	59.2	20.31	20.26	19.59	38.8	39.1	38.4	52.3	51.8	51.0
Stone, clay, and glass products	**89.8**	**87.0**	**85.9**	**85.3**	**82.1**	**79.6**	**25.90**	**25.62**	**25.17**	**37.2**	**37.2**	**36.5**	**68.9**	**68.3**	**68.2**
Brick, tile, and terra cotta	65.4	64.1	64.8	56.1	54.8	54.6	22.30	22.07	21.74	37.4	37.5	36.9	59.4	58.8	58.7
Cement	69.3	65.8	64.8	66.2	62.3	61.1	27.13	26.93	26.82	38.2	38.0	37.9	71.0	70.9	70.9
Glass	119.7	116.0	114.4	141.1	135.9	131.0	28.76	28.58	28.02	37.1	37.2	36.3	77.4	76.9	77.2
Marble, granite, slate, and other products	43.4	41.8	39.0	31.1	30.0	26.9	25.37	25.33	24.29	35.2	35.6	34.6	72.3	71.6	70.8
Pottery	111.2	107.8	104.7	104.4	99.7	95.5	23.95	23.38	22.92	37.3	37.0	36.4	64.4	63.6	63.5
Nondurable goods															
Textiles and their products	**111.6**	**110.1**	**106.4**	**107.0**	**103.2**	**95.1**	**19.39**	**19.09**	**18.13**	**37.8**	**37.4**	**35.7**	**51.8**	**51.4**	**51.2**
Fabrics	102.7	101.7	99.7	101.1	98.5	93.1	18.89	18.61	17.93	38.6	38.3	36.9	49.4	49.2	49.2
Carpets and rugs	85.5	83.9	82.1	83.1	79.2	74.7	26.86	26.10	25.18	39.0	38.4	37.3	68.9	68.1	67.5
Cotton goods	103 6	102.6	100.7	104.8	101.7	96.9	16.39	16.04	15.60	38.8	38.4	37.2	42.3	41.8	41.9
Cotton small wares	98.2	95.1	91.6	104.5	100.6	92.7	20.87	20.58	19.74	41.1	41.1	39.3	50.8	50.2	50.3
Dyeing and finishing textiles	142.0	139.7	134.9	133.3	128.8	120.2	22.91	22.38	21.65	40.8	40.6	39.3	55.5	55.0	55.1
Hats, fur-felt	84.7	83.7	82.3	88.1	89.0	80.0	29.12	29.52	26.93	37.8	38.6	35.9	77.1	77.1	74.9
Hosiery [3] [6]	143.8	142.8	142.9	160.5	156.2	148.6	19.80	19.48	18.51	36.2	35.9	33.8	54.6	54.5	55.0

See footnotes at end of table.

TABLE 3.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries*—Continued

MANUFACTURING—Continued

[Indexes are based on 3-year average, 1923–25=100. For "all manufacturing," "durable goods," "nondurable goods," and "aluminum manufactures," they have been adjusted to preliminary 1939 census figures. Except as otherwise noted, the indexes for all other manufacturing groups and industries have been adjusted to 1937 census figures and are not comparable to indexes published in pamphlets prior to August 1939. Comparable series available upon request]—Continued

Industry	Employment index			Pay-roll index			Average weekly earnings [1]			Average hours worked per week [1]			Average hourly earnings [1]		
	March 1941	February 1941	January 1941	March 1941	February 1941	January 1941	March 1941	February 1941	January 1941	March 1941	February 1941	January 1941	March 1941	February 1941	January 1941
Nondurable goods—Continued															
Textiles and their products—Continued.															
Fabrics—Continued.													*Cents*	*Cents*	*Cents*
Knitted outerwear	68.2	68.4	66.2	60.8	59.9	56.0	$18.34	$18.14	$17.65	37.4	36.6	35.8	49.1	48.9	48.9
Knitted underwear	80.4	78.3	76.9	81.7	76.6	73.4	17.00	16.41	16.06	38.3	37.3	36.0	44.2	44.2	44.6
Knitted cloth	145.6	141.9	139.7	133.0	128.5	125.0	20.36	20.16	19.90	39.6	39.5	37.9	51.1	50.5	50.3
Silk and rayon goods	67.2	66.5	65.0	57.5	55.9	52.6	17.55	17.22	16.53	37.8	37.3	35.7	46.2	46.0	46.1
Woolen and worsted goods	102.7	102.6	99.9	100.3	99.9	93.6	22.51	22.57	21.78	39.1	39.2	37.9	57.6	57.7	57.6
Wearing apparel	127.0	124.2	116.8	112.2	108.0	93.2	20.74	20.39	18.70	36.3	35.7	33.3	55.6	55.5	55.2
Clothing, men's	116.1	114.4	109.5	99.6	96.5	87.3	22.06	21.58	20.36	36.6	36.0	33.5	60.2	59.9	60.5
Clothing, women's	177.8	172.6	161.5	147.8	142.7	119.5	21.87	21.74	19.47	36.1	35.5	33.2	56.0	56.4	55.3
Corsets and allied garments	117.8	114.5	112.0	133.4	126.8	115.8	18.87	18.45	17.24	38.5	38.1	35.6	48.7	48.1	48.2
Men's furnishings	122.7	118.7	107.5	128.9	123.6	103.2	15.62	15.54	14.33	36.1	36.0	33.3	42.4	42.3	42.2
Millinery	91.0	88.7	74.9	84.6	76.1	55.2	28.50	26.08	22.31	34.9	34.1	30.5	70.0	67.7	64.8
Shirts and collars	127.5	125.4	118.7	121.1	117.2	103.9	14.87	14.63	13.71	36.2	35.6	33.1	41.7	41.6	42.1
Leather and its manufactures	**98.7**	**96.9**	**93.4**	**96.1**	**91.5**	**83.3**	**22.61**	**21.89**	**20.67**	**39.7**	**39.1**	**37.3**	**57.2**	**56.4**	**55.5**
Boots and shoes	97.0	95.0	91.4	94.2	88.9	80.1	21.77	20.92	19.58	39.7	38.9	37.0	54.9	54.0	53.0
Leather	89.1	88.1	85.8	94.3	92.3	86.7	26.47	26.23	25.27	39.6	39.6	38.3	67.0	66.4	66.2
Food and kindred products	**120.4**	**119.1**	**121.4**	**122.5**	**119.6**	**120.2**	**25.74**	**25.25**	**24.89**	**40.0**	**39.5**	**39.0**	**65.5**	**65.1**	**64.9**
Baking	145.0	142.9	140.5	140.0	137.8	134.5	26.66	26.73	26.46	41.6	41.6	41.1	64.1	64.4	64.4
Beverages [3]	263.7	255.3	256.1	312.9	294.6	289.0	34.63	33.72	32.96	38.9	38.0	37.2	90.1	89.5	89.5
Butter	96.0	91.4	91.6	85.3	81.3	80.1	23.12	23.15	22.84	45.4	45.3	44.6	50.2	50.6	50.9
Canning and preserving	80.4	85.1	90.8	75.6	76.4	79.2	17.90	17.02	16.67	34.5	33.9	33.0	52.5	50.7	51.0
Confectionery	89.3	86.1	86.9	93.5	89.2	86.9	20.30	20.04	19.19	39.2	38.8	37.6	52.4	52.3	51.9
Flour	76.8	76.6	76.9	72.6	73.0	72.2	25.45	25.66	25.27	41.0	41.3	41.0	61.4	61.6	60.8
Ice cream [3 4]	70.8	68.2	67.7	62.5	59.9	58.8	30.21	30.00	29.41	45.2	44.6	44.2	65.2	65.4	**65.3**
Slaughtering and meat packing	110.7	110.6	116.3	114.2	113.5	119.7	26.81	26.70	26.84	39.2	39.0	39.3	68.5	68.5	**68.1**
Sugar, beet	46.0	52.9	103.4	47.9	56.6	96.3	26.91	27.63	24.03	34.5	38.4	36.5	81.0	75.4	63.0
Sugar refining, cane	95.7	88.6	87.6	92.3	73.0	70.3	27.32	23.33	22.73	41.5	35.5	35.0	65.8	65.6	65.0
Tobacco manufactures	**63.3**	**63.7**	**60.8**	**62.7**	**61.7**	**59.3**	**17.99**	**17.54**	**17.76**	**36.1**	**35.4**	**35.7**	**49.7**	**49.5**	**49.8**
Chewing and smoking tobacco and snuff	54.2	56.5	57.7	64.2	63.5	66.5	19.10	18.12	18.60	35.3	33.7	34.9	54.3	53.9	53.7
Cigars and cigarettes	64.4	64.6	61.1	62.4	61.3	58.3	17.78	17.42	17.57	36.1	35.6	35.8	49.2	49.0	49.3

Cigars and cigarettes	64.4	64.6	61.1	62.4	63.5	61.3	66.5	58.3	19.10	17.78	18.12	17.42	18.60	17.57	35.3	36.1	33.7	35.6	34.9	35.8	54.3	49.2	53.9	49.0	53.7	49.3
Paper and printing	118.2	117.2	116.7	120.4	117.1	115.4	30.67	30.01	29.75	39.7	39.1	38.8	80.5	80.3	80.2	
Boxes, paper	123.0	118.8	118.4	145.0	136.2	131.8	23.54	22.87	22.26	40.8	39.8	38.8	58.2	57.9	57.6	
Paper and pulp	118.5	117.3	115.7	136.4	132.5	127.5	28.19	27.66	27.02	42.5	41.9	40.8	66.4	66.1	66.2	
Printing and publishing:																
Book and job	102.1	102.8	103.6	94.9	93.1	94.7	32.08	31.42	31.76	39.8	39.2	39.6	82.3	81.4	81.3	
Newspapers and periodicals	117.1	116.2	115.3	112.3	109.9	108.1	39.02	38.41	38.06	36.0	35.7	35.6	104.8	104.7	104.8	
Chemical, petroleum, and coal products	**130.7**	**127.8**	**126.0**	**148.2**	**144.2**	**142.1**	**30.38**	**30.24**	**30.31**	**39.1**	**38.8**	**38.9**	**76.6**	**77.0**	**77.0**	
Petroleum refining	119.5	119.2	119.1	133.4	132.1	132.2	34.68	34.36	34.46	36.0	35.6	35.7	96.7	97.0	97.0	
Other than petroleum refining	133.4	129.9	127.7	152.7	148.0	145.2	28.86	28.71	28.81	40.1	39.8	39.9	70.5	70.7	70.6	
Chemicals	159.3	155.1	152.0	201.7	193.9	188.2	33.93	33.50	33.10	41.0	40.6	40.3	82.9	82.6	82.2	
Cottonseed—oil, cake, and meal	99.4	112.0	114.3	93.6	101.9	111.0	15.15	15.02	15.55	42.5	43.4	44.6	34.6	34.0	33.8	
Druggists' preparations	120.9	119.3	116.1	137.7	136.4	130.9	25.62	25.72	25.43	39.9	39.9	39.6	61.6	61.9	61.4	
Explosives	160.7	159.0	150.3	206.6	209.2	202.5	35.14	35.96	36.83	40.5	41.0	41.4	86.8	87.6	89.0	
Fertilizers	140.9	113.2	103.8	116.9	92.8	85.5	14.88	14.69	14.89	36.5	34.9	34.8	40.8	42.1	42.9	
Paints and varnishes	132.9	128.6	126.3	147.4	141.7	137.4	30.46	30.22	29.86	40.8	40.6	40.3	74.9	74.6	74.1	
Rayon and allied products	312.2	311.0	313.5	332.9	327.6	335.9	27.28	26.94	27.40	38.9	38.4	39.2	70.0	70.2	69.9	
Soap	90.7	89.8	85.9	114.8	112.6	107.7	29.84	29.54	29.58	40.5	40.3	40.0	73.6	73.4	74.0	
Rubber products	**102.9**	**100.7**	**98.8**	**119.5**	**115.3**	**111.6**	**31.80**	**31.20**	**30.85**	**39.7**	**39.3**	**39.0**	**79.9**	**79.2**	**78.8**	
Rubber boots and shoes	69.3	68.0	68.0	80.6	78.9	79.2	26.77	26.66	26.76	41.6	41.3	41.9	64.3	64.5	63.9	
Rubber tires and inner tubes	80.0	78.6	77.9	102.7	99.7	97.9	37.55	37.02	36.67	37.9	37.8	37.7	99.4	98.1	97.5	
Rubber goods, other	179.2	174.9	168.9	194.6	185.2	173.5	26.31	25.72	24.97	41.0	40.3	39.4	64.7	64.3	63.9	

NONMANUFACTURING

[Indexes are based on 12-month average, 1929=100]

													Cents	*Cents*	*Cents*	
Coal mining:																
Anthracite [7 8]	50.2	50.6	50.3	42.4	45.2	38.5	$27.79	$29.35	$25.13	29.9	31.4	27.0	92.7	29.6	92.5	
Bituminous [7]	91.4	90.6	90.2	95.0	90.8	87.8	27.89	26.90	26.00	32.0	30.9	29.7	88.2	88.4	88.5	
Metalliferous mining [9]	74.0	73.4	72.5	72.7	71.8	70.4	30.99	30.83	30.31	40.8	41.0	40.7	76.1	75.6	74.8	
Quarrying and nonmetallic mining	44.1	42.4	41.7	40.2	38.2	36.9	22.87	22.64	22.06	38.8	38.9	38.2	58.9	58.2	57.6	
Crude-petroleum production	60.5	60.5	60.5	56.8	57.6	56.2	37.82	38.35	33.27	37.6	37.5	37.8	89.1	90.2	88.3	
Public utilities:																
Telephone and telegraph [10 11]	81.8	80.9	80.4	106.8	104.3	103.9	32.04	31.64	31.69	39.7	39.5	39.7	81.1	80.5	80.4	
Electric light and power [10 11]	90.4	90.1	90.5	106.8	105.4	105.1	35.92	35.57	35.49	39.4	39.2	39.4	91.2	90.8	90.3	
Street railways and busses [10 11 12]	68.3	68.0	68.3	72.8	71.0	70.7	34.65	34.00	33.63	46.7	45.8	45.3	73.2	73.4	73.1	
Trade:																
Wholesale [10 13]	91.7	91.4	91.2	82.2	81.4	80.5	31.18	30.96	30.59	40.6	40.5	40.6	76.7	76.6	75.0	
Retail [10 11]	92.1	90.7	90.5	86.3	84.6	83.7	21.66	21.73	21.53	42.6	42.7	42.7	55.0	54.9	54.5	
Food [11]	106.3	105.6	103.2	99.2	98.3	96.5	23.86	23.76	24.51	43.0	43.0	43.3	52.8	52.7	53.1	
General merchandizing [10 11]	95.4	92.9	94.0	88.1	86.6	86.5	18.33	18.52	18.22	38.6	38.9	38.8	46.5	46.7	46.5	
Apparel [11]	82.9	77.9	78.5	76.3	73.6	74.5	21.25	21.83	21.89	37.8	38.5	39.0	55.4	56.0	55.8	
Furniture [11]	73.8	75.0	74.8	66.1	66.3	66.2	28.39	28.12	27.96	43.8	43.9	43.7	68.1	67.9	68.3	
Automotive [11]	87.6	86.7	86.2	87.0	84.3	80.9	29.90	29.31	28.26	46.8	46.7	46.7	63.9	62.9	61.0	
Lumber [11]	72.1	71.6	72.7	69.3	68.1	68.5	26.88	26.59	26.16	42.5	42.0	41.7	64.8	64.5	64.0	

See footnotes at end of table.

TABLE 3.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries*—Continued

NONMANUFACTURING—Continued

[Indexes are based on 12-month average, 1929=100]

Industry	Employment index			Pay-roll index			Average weekly earnings [1]			Average hours worked per week [1]			Average hourly earnings [1]		
	March 1941	February 1941	January 1941	March 1941	February 1941	January 1941	March 1941	February 1941	January 1941	March 1941	February 1941	January 1941	March 1941	February 1941	January 1941
													Cents	*Cents*	*Cents*
Hotels (year-round) [7 10 14]	94.3	93.9	92.9	86.2	86.1	84.1	$15.78	$15.81	$15.65	46.0	45.7	45.9	34.0	34.1	33.8
Laundries [7]	102.6	101.1	101.4	90.8	89.7	89.8	18.37	18.41	18.37	43.2	43.2	42.9	42.7	42.7	42.9
Dyeing and cleaning [7]	104.4	101.4	101.0	76.9	74.4	73.3	20.22	20.13	19.92	42.4	42.1	41.9	49.1	49.0	48.8
Brokerage [10 13]	−.4	−1.6	−2.0	−1.7	−2.7	−2.6	37.32	37.82	37.92	(16)	(16)	(16)	(16)	(16)	(16)
Insurance [10 14]	+.1	+.2	+(17)	+.3	−.3	+1.0	37.34	37.26	37.52	(16)	(16)	(16)	(16)	(16)	(16)
Building construction [13]	+.2	−2.0	−8.5	+.5	−.4	−10.3	32.61	32.67	32.10	32.8	32.8	32.6	100.0	99.7	98.6

[1] Revised series. Mimeographed sheets giving averages by years, 1932 to 1939, inclusive, and by months, January 1938 to August 1940, inclusive, available on request. Average hours and average hourly earnings are computed from data supplied by a smaller number of establishments than average weekly earnings, as not all reporting firms furnish man-hours. The figures are not strictly comparable from month to month because of changes in the size and composition of the reporting sample.

[2] See tables 9, 10, and 11 in the December 1940 issue of Employment and Pay Rolls for comparable series back to January 1919 for all manufacturing and back to January 1923 for the durable- and nondurable-goods groups.

[3] Revisions in the following industries have been made as indicated:

Tin cans.—December 1940 average weekly earnings and average hourly earnings to $25.72 and 63.8 cents; pay-roll index to 113.1.

Tools.—October, November, and December average weekly earnings to $27.15, $28.24, $29.79; October and November average weekly hours to 42.5 and 43.6; October, November, and December average hourly earnings to 64.1, 64.9, and 65.7; October, November, and December employment and pay-roll indexes to 106.1, 111.8, 116.7; and 113.9, 124.9, 137.1.

Beverages.—December average weekly earnings, average weekly hours, average hourly earnings to $33.54, 38.1 hours, 88.8 cents; December employment and pay-roll indexes to 260.5 and 299.9.

Hosiery.—December employment index revised to 146.0; July, August, November, and December pay-roll indexes to 129.2, 143.6, 160.2, 160.1.

Ice cream.—November and December employment indexes revised to 71.0, 69.5; December pay-roll index to 61.0.

[4] Because of change in the composition of the reporting sample, hours and earnings are not comparable with those previously published as indicated.

Agricultural implements.—Average weekly earnings, average weekly hours, average hourly earnings (comparable December figures $32.89, 40.3 hours, 81.8 cents).

Hosiery.—Average weekly earnings and average weekly hours (comparable July, August, September, October, November, December figures $17.60, $18.86, $18.90, $19.71, $19.71, $19.62; 31.8, 34.0, 34.3, 36.2, 36.1, 35.8 hours); average hourly earnings (comparable July figure 55.6 cents. Published figures for succeeding months not revised).

Ice cream.—Average weekly earnings (comparable August, September, October, November, and December figures $29.05, $29.18, $29.53, $29.23, $29.79); average weekly hours (comparable October figure 44.5); average hourly earnings (comparable August, September, October, November, December figures 61.9, 63.3, 65.1, 65.2, 65.2 cents).

[5] Revised series—adjusted on basis of a complete employment survey of the aircraft industry made by the Bureau of Labor Statistics for August 1940. Not comparable with previously published indexes from January 1939 to August 1940, inclusive. Comparable figures for this period given in table 9 of the September 1940 issue of Employment and Pay Rolls.

[6] Not comparable with previously published figures. See table 4 for revised figures from January 1935 to February 1941.

[7] Indexes adjusted to 1935 census. Comparable series back to January 1929 presented in January 1938 issue of the pamphlet.

[8] See table 7 of October 1940 Employment and Pay Rolls for revised employment and pay-roll indexes, average hours worked per week, average hourly earnings, and average weekly earnings in anthracite mining, February 1940 to September 1940, inclusive.

[9] See table 7 of February 1941 pamphlet, "Employment and Pay Rolls," for revised figures for metalliferous mining from January 1938 to January 1941, inclusive.

[10] Average weekly earnings, hourly earnings, and hours not comparable with figures published in pamphlets prior to January 1938 as they now exclude corporation officers, executives, and other employees whose duties are mainly supervisory.

[11] Retail-trade indexes adjusted to 1935 census and public-utility indexes to 1937 census. Not comparable to indexes published in Employment and Pay Rolls pamphlets prior to January 1940 or in the Monthly Labor Review prior to April 1940, with but one exception, retail furniture, which has been revised since publication of the July 1940 pamphlet back to January 1936. Comparable series for earlier months available upon request.

[12] Covers street railways and trolley and motorbus operations of subsidiary, affiliated, and successor companies; formerly "electric-railroad and motorbus operation and maintenance."

[13] Indexes adjusted to 1933 census. Comparable series in November 1934 and subsequent issues of the pamphlet.

[14] Cash payments only; additional value of board, room, and tips not included.

[15] Indexes of employment and pay rolls are not available; percentage changes from preceding month substituted.

[16] Not available.

[17] Less than 1/10 of 1 percent.

*The indexes for "automobiles" have been adjusted to 1933 census figures, but not to later census figures because of problems involving integrated industries.

TABLE 4.—*Revised Employment, Pay Rolls, Hours, and Earnings in Aluminum Manufactures, January 1935 to February 1941, Inclusive* [1]

Year and month	Indexes (1923–25=100. Adjusted to preliminary 1939 census figures)		Average weekly earnings	Average hours worked per week	Average hourly earnings
	Employment	Pay rolls			
1935					*Cents*
January	113.0	86.9	$19.47	36.8	54.5
February	120.5	98.1	20.81	39.0	53.8
March	124.6	102.4	21.25	39.5	53.8
April	125.6	103.0	21.25	39.4	53.9
May	125.6	102.0	20.91	38.8	53.9
June	124.4	98.4	20.34	37.7	53.9
July	123.0	91.7	18.90	34.6	54.6
August	124.5	101.2	21.08	39.1	53.9
September	129.3	106.1	21.35	39.1	54.5
October	134.0	114.1	22.28	41.2	54.1
November	134.1	115.3	22.47	40.7	54.7
December	132.8	114.8	22.58	41.0	54.5
Average	125.9	102.8	21.09	39.0	54.2
1936					
January	130.8	111.5	22.13	40.1	55.2
February	131.6	114.5	22.60	40.3	56.1
March	136.3	119.1	22.74	40.6	55.9
April	134.4	117.0	22.59	40.2	56.0
May	134.3	116.9	23.00	40.4	56.9
June	138.5	119.8	22.79	40.3	56.5
July	142.3	121.8	22.53	40.3	56.0
August	142.2	127.0	23.41	41.6	56.2
September	142.4	124.7	23.09	40.4	57.1
October	149.1	139.3	24.59	42.4	58.1
November	151.3	145.1	25.24	43.3	58.4
December	151.0	146.7	25.36	43.3	58.6
Average	140.3	125.3	23.52	41.3	57.0
1937					
January	152.4	146.8	24.99	41.5	60.2
February	156.5	156.9	25.92	43.4	59.7
March	157.6	166.2	27.24	43.6	62.5
April	158.2	166.0	27.05	42.6	63.5
May	159.2	172.7	28.03	42.2	66.6
June	159.4	168.2	27.23	40.2	67.9
July	160.4	165.2	26.53	39.0	68.1
August	162.1	174.1	27.68	40.8	67.9
September	162.0	168.4	26.69	39.2	68.2
October	129.5	144.4	28.41	40.3	70.7
November	155.7	162.4	26.57	38.9	68.4
December	145.2	142.9	25.04	36.3	69.0
Average	154.8	161.2	26.78	40.7	65.9
1938					
January	131.1	124.4	23.99	34.5	69.7
February	128.2	124.7	24.55	35.5	69.2
March	127.1	130.2	25.87	37.1	69.7
April	122.7	119.5	24.54	35.0	70.1
May	120.8	118.2	24.55	35.2	69.8
June	115.6	108.2	23.39	33.4	70.0
July	115.2	108.9	23.60	33.4	70.8
August	120.5	123.8	25.82	37.0	69.8
September	127.3	135.5	26.92	38.6	69.7
October	132.1	143.5	27.48	39.8	69.1
November	132.9	143.6	27.32	40.1	68.1
December	133.8	143.9	27.29	39.1	69.8
Average	125.6	127.0	25.50	36.7	69.6
1939					
January	134.2	143.3	27.03	38.5	70.2
February	141.3	153.4	27.42	39.6	69.3
March	147.9	160.2	27.36	39.6	69.1
April	150.7	163.2	27.33	39.4	69.4
May	148.5	159.4	27.10	39.1	69.2
June	148.4	161.2	27.41	39.0	70.1

[1] Average hours and earnings for months prior to November 1936 have not been revised but are shown for the convenience of the reader.

TABLE 4.—*Revised Employment, Pay Rolls, Hours, and Earnings in Aluminum Manufactures, January 1935 to February 1941, Inclusive*—Continued

Year and month	Indexes (1923–25=100. Adjusted to preliminary 1939 census figures)		Average weekly earnings	Average hours worked per week	Average hourly earnings
	Employment	Pay rolls			
1939—Continued					*Cents*
July	149.7	148.6	$24.95	34.4	72.3
August	153.6	164.5	26.88	38.3	70.1
September	153.4	170.8	27.94	39.6	70.3
October	167.5	192.2	28.80	41.0	69.9
November	174.8	197.8	28.41	40.5	70.1
December	176.5	206.0	29.33	41.0	71.4
Average	153.9	168.4	27.55	39.2	70.1
1940					
January	176.8	200.6	28.46	39.6	71.6
February	178.4	204.0	28.69	40.1	71.4
March	180.0	205.5	28.62	39.9	71.7
April	178.4	207.7	29.17	40.3	72.4
May	180.2	210.3	29.25	40.2	72.8
June	182.2	211.5	29.08	40.0	72.7
July	186.5	200.6	26.90	36.6	73.4
August	195.2	232.9	29.94	40.4	74.2
September	200.6	248.1	30.88	41.4	74.6
October	209.7	259.6	30.97	41.7	74.2
November	217.5	270.2	31.04	41.7	74.5
December	218.0	276.8	31.70	42.3	74.9
Average	192.0	227.3	29.64	40.4	73.3
1941					
January	225.4	280.6	31.16	41.4	75.3
February	225.2	285.2	31.73	42.0	75.5

TABLE 5.—*Indexes of Employment and Pay Rolls in Fifty-five Additional Manufacturing Industries*

[12-month average 1939=100]

Industry	Employment			Pay rolls		
	March 1941	February 1941	January 1941	March 1941	February 1941	January 1941
Iron and steel group:						
Metal doors and shutters	125.5	121.1	121.0	135.5	129.9	124.2
Firearms	272.0	254.4	234.5	367.4	345.1	296.3
Screw-machine products	173.3	167.5	156.9	221.7	213.5	186.2
Wire, not made in rolling mills	133.3	130.9	127.1	154.8	147.8	142.2
Wrought pipe, not made in rolling mills	144.9	141.8	142.9	167.9	161.0	166.9
Steel barrels, kegs, and drums	108.1	111.7	113.6	126.7	127.7	130.6
Machinery group:						
Machine-tool accessories	190.7	180.2	167.3	235.6	219.4	194.2
Pumps	156.3	145.9	138.2	199.0	181.5	166.4
Refrigerators and refrigerating apparatus	147.7	140.5	132 1.	173.8	160.4	144.9
Sewing machines	117.4	113.4	111.9	148.1	138.2	127.8
Washing machines, wringers, and driers	125.4	118.0	111.8	145.2	136.6	116.2
Transportation equipment group:						
Motorcycles, bicycles, and parts	133.6	123.7	117.2	143.6	130.7	120.5
Nonferrous metals group:						
Sheet-metal work	140.3	137.8	131.1	153.9	150.2	143.8
Smelting and refining of scrap metal	135.4	132.0	122.6	162.5	146.8	135.4
Lumber group:						
Caskets and morticians' goods	101.8	101.9	100.4	109.7	111.4	106.3
Wood preserving	116.6	112.7	107.0	135.8	126.6	118.4
Wood turned and shaped	116.3	114.0	110.7	130.7	127.1	117.2
Wooden boxes, other than cigar	115.7	116.0	114.5	129.1	124.4	120.5
Mattresses and bedsprings	114.5	110.9	107.7	125.7	119.1	111.3

TABLE 5.—*Indexes of Employment and Pay Rolls in Fifty-five Additional Manufacturing Industries*—Continued

Industry	Employment			Pay rolls		
	March 1941	February 1941	January 1941	March 1941	February 1941	January 1941
Stone, clay, and glass products group:						
Abrasive wheels	164.3	156.5	151.1	182.7	171.7	157.9
Asbestos products	115.8	109.8	105.5	138.2	129.6	119.1
Lime	111.8	108.9	107.9	120.8	116.9	120.2
Gypsum	109.2	108.0	107.0	112.8	114.3	112.6
Glass products made from purchased glass	130.2	133.8	133.6	142.4	135.7	134.2
Wallboard and plaster, except gypsum	122.2	120.9	119.4	136.5	132.6	131.5
Textiles:						
Textile bags	104.8	102.8	97.0	115.8	111.0	100.7
Cordage and twine	120.4	117.9	113.9	138.3	130.3	121.2
House furnishings:						
Curtains, draperies, and bedspreads	104.5	102.7	94.5	125.1	118.9	100.6
Other	128.8	122.5	116.2	143.0	135.8	126.7
Jute goods, except felt	113.5	106.4	106.4	136.5	121.4	115.5
Handkerchiefs	100.3	97.4	95.7	117.1	108.4	96.1
Leather group:						
Boot and shoe cut stock and findings	104.8	103.5	99.8	117.5	114.0	108.5
Leather gloves and mittens	130.1	125.3	121.9	156.6	146.4	133.6
Trunks and suitcases	131.7	137.1	129.0	131.1	136.0	130.2
Food group:						
Cereal preparations	100.3	94.8	94.8	107.3	98.3	99.3
Condensed and evaporated milk	102.6	99.9	96.6	107.9	104.5	99.0
Feeds, prepared	101.3	100.9	99.6	104.6	102.8	101.6
Paper and printing group:						
Paper bags	105.5	103.5	100.5	117.6	114.3	111.0
Envelopes	111.0	107.5	105.2	116.7	113.0	106.8
Paper goods, not elsewhere classified	115.5	112.9	110.0	123.8	118.2	113.6
Bookbinding	105.7	104.3	101.9	121.8	117.5	113.5
Lithographing	96.6	96.4	96.1	106.1	98.4	99.4
Chemical, petroleum, and coal products group:						
Ammunition	293.5	278.0	245.8	322.7	288.3	241.1
Compressed and liquefied gases	133.1	128.0	124.1	162.9	143.9	136.1
Perfumes and cosmetics	90.3	90.2	86.8	91.0	89.0	85.8
Coke-oven products	118.5	119.0	120.4	123.2	122.1	123.3
Paving materials	86.4	83.8	88.8	93.7	87.8	93.6
Roofing materials	115.9	105.9	102.6	126.1	112.1	101.3
Miscellaneous group:						
Chemical fire extinguishers	218.4	216.6	202.1	279.9	263.7	251.6
Buttons	111.5	111.2	108.3	127.8	125.5	118.3
Instruments, professional, scientific, and commercial	161.0	152.7	147.9	192.9	180.5	172.2
Optical goods	149.8	143.9	138.1	165.2	154.8	143.1
Photographic apparatus	110.6	109.0	108.4	120.8	115.8	111.9
Pianos, organs, and parts	121.5	122.0	120.9	127.0	125.7	121.7
Toys, games, and playground equipment	111.4	102.6	83.5	117.0	104.2	82.5

TABLE 6.—*Indexes of Employ ment and Pay Rolls in Selected Manufacturing [1] and Nonmanufacturing [2] Industries, March 1940 to March 1941*

Industry	1940											1941		
	Av.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Manufacturing	Employment													
All industries	107.5	104.4	103.2	102.5	103.1	103.2	107.4	111.4	113.8	114.6	116.2	115.5	117.8	119.9
Durable goods [3]	104.3	99.1	98.7	99.2	99.8	98.4	102.4	108.2	112.8	115.5	117.6	118.3	121.0	123.7
Nondurable goods [4]	110.6	109.5	107.5	105.6	106.2	107.8	112.2	114.4	114.8	113.8	114.8	112.7	114.7	116.3
Nonmanufacturing														
Anthracite mining [5]	50.7	52.2	51.2	51.8	49.7	50.5	49.9	49.8	49.4	50.4	50.8	50.3	50.6	50.2
Bituminous-coal mining [5]	88.0	89.7	86.2	85.1	83.8	84.9	86.6	87.7	89.2	89.8	90.1	90.2	90.6	91.4
Metalliferous mining [6]	69.9	66.2	67.7	69.2	70.3	71.0	71.5	72.5	72.6	72.5	72.2	72.5	73.4	74.0
Quarrying and nonmetallic mining	45.3	41.0	44.5	46.9	47.9	48.1	48.5	48.9	48.8	47.2	45.4	41.7	42.4	44.1
Crude-petroleum production	62.9	63.2	63.1	63.3	63.8	63.7	63.6	63.0	62.4	61.3	60.7	60.5	60.5	60.5
Telephone and telegraph [7]	77.9	76.0	76.7	77.3	77.8	78.8	79.0	78.9	79.1	79.2	79.7	80.4	80.9	81.8
Electric light and power [7]	91.1	89.3	90.0	90.6	91.2	92.2	93.0	92.7	92.3	91.8	91.3	90.5	90.1	90.4
Street railways and busses [7 8]	68.5	68.2	68.3	68.4	68.5	68.4	68.4	68.5	68.7	68.7	68.4	68.3	68.0	68.3
Wholesale trade [7]	90.4	90.5	89.3	88.9	89.6	89.2	90.1	90.9	91.0	91.8	92.5	91.2	91.4	91.7
Retail trade	92.3	91.1	89.8	91.2	91.9	89.1	88.7	92.8	94.3	96.3	108.1	90.5	90.7	92.1
Year-round hotels [5]	92.0	92.0	92.7	93.4	92.0	90.3	90.3	91.6	93.4	92.3	92.6	92.9	93.9	94.3
Laundries [5]	99.5	96.2	97.2	99.1	102.1	102.5	102.8	101.9	100.2	99.7	100.3	101.4	101.1	102.6
Dyeing and cleaning [5]	104.7	99.5	104.5	108.7	112.6	108.2	106.7	110.0	109.4	106.0	103.3	101.0	101.4	104.4
Manufacturing	Pay rolls													
All industries	105.4	99.8	97.9	97.8	99.5	98.2	105.5	111.6	116.2	116.4	122.4	120.7	126.9	131.2
Durable goods [3]	107.8	98.7	98.4	98.7	101.4	97.4	106.5	115.1	123.4	125.1	131.6	132.0	139.3	144.5
Nondurable goods [4]	102.7	101.0	97.3	96.8	97.4	99.1	104.4	107.7	108.1	106.6	112.1	108.1	112.9	116.3
Nonmanufacturing														
Anthracite mining [5]	38.5	38.4	36.3	40.0	40.6	36.5	33.1	39.3	32.3	37.6	42.7	38.5	45.2	42.4
Bituminous-coal mining [5]	81.2	78.3	72.2	75.3	73.9	75.2	82.5	83.2	83.6	84.5	91.4	87.8	90.8	95.0
Metalliferous mining [6]	66.7	63.1	63.4	65.7	65.3	63.6	68.5	69.5	71.3	69.8	72.8	70.4	71.8	72.7
Quarrying and nonmetallic mining	40.5	34.1	38.1	42.7	43.9	43.5	45.2	46.2	46.7	42.3	42.4	36.9	38.2	40.2
Crude-petroleum production	58.2	58.4	59.0	58.7	58.8	59.1	59.0	58.2	57.6	56.8	55.9	56.2	57.6	56.8
Telephone and telegraph [7]	100.2	98.1	98.7	98.8	100.0	101.3	100.4	101.8	102.2	103.2	103.5	103.9	104.3	106.8
Electric light and power [7]	104.8	102.3	103.3	104.2	104.8	105.8	108.1	105.8	107.0	106.9	106.0	105.1	105.4	106.8
Street railways and busses [7 8]	70.4	69.5	69.2	69.2	70.5	70.0	70.4	71.5	70.7	70.3	73.1	70.7	71.0	72.8
Wholesale trade	79.0	77.8	77.4	77.4	78.4	78.3	78.7	81.1	80.2	80.7	83.4	80.5	81.4	82.2
Retail trade [7]	84.2	82.0	82.3	83.4	84.8	82.6	81.5	85.1	85.8	87.1	97.3	83.7	84.6	86.3
Year-round hotels [5]	82.4	81.8	83.2	83.0	82.0	80.5	80.7	81.8	84.2	83.6	84.1	84.1	86.1	86.2
Laundries [5]	87.7	84.1	85.6	88.5	92.4	90.0	90.5	89.9	88.0	87.2	89.2	89.8	89.7	90.8
Dyeing and cleaning [5]	78.2	72.7	79.6	85.4	89.6	80.0	78.9	85.6	82.4	77.8	75.8	73.3	74.4	76.9

[1] 3-year average 1923–25=100—adjusted to preliminary 1939 Census of Manufactures. See tables 9, 10, and 11 of December 1940 Employment and Pay Rolls for comparable figures back to January 1919 for "all manufacturing" and January 1923 for "durable goods" and "nondurable goods."

[2] 12-month average for 1929=100. Comparable indexes for wholesale trade, quarrying, metal mining, and crude-petroleum production are in November 1934 and subsequent issues of Employment and Pay Rolls, or in February 1935 and subsequent issues of Monthly Labor Review. For other nonmanufacturing indexes see notes 5 and 6.

[3] Includes: Iron and steel, machinery, transportation equipment, nonferrous metals, lumber and allied products, and stone, clay, and glass products.

[4] Includes: Textiles and their products, leather and its manufactures, food and kindred products, tobacco manufactures, paper and printing, chemicals and allied products, products of petroleum and coal, rubber products, and a number of miscellaneous industries not included in other groups.

[5] Indexes have been adjusted to the 1935 census. Comparable series from January 1929 forward are presented in January 1938 and subsequent issues of the pamphlet. See also table 7 of October 1940 pamphlet for revised figures for anthracite mining February 1940 to September 1940.

[6] See table 7 of February 1941 pamphlet for revised indexes January 1938 to January 1941.

[7] Retail-trade indexes adjusted to 1935 census and public-utility indexes to 1937 census. Not comparable with indexes published in Employment and Pay Rolls pamphlets prior to January 1940 or in Monthly Labor Review prior to April 1940. Comparable series January 1929 to December 1939 available in mimeographed form.

[8] Covers street railways and trolley and motorbus operations of subsidiary, affiliated, and successor companies.

INDUSTRIAL AND BUSINESS EMPLOYMENT IN PRINCIPAL METROPOLITAN AREAS

A comparison of employment and pay rolls in February and March 1941 is made in table 7 for 13 metropolitan areas, each of which had

a population of 500,000 or over in 1930. Cities within these areas but having a population of 100,000 or over are not included. Footnotes to the table specify which cities are excluded. Data concerning them have been prepared in a supplementary tabulation which is available on request. The figures represent reports from cooperating establishments and cover both full- and part-time workers in the manufacturing and nonmanufacturing industries presented in table 3, with the exception of building construction, and include also miscellaneous industries.

Revisions made in the figures after they have gone to press, chiefly because of late reports by cooperating firms, are incorporated in the supplementary tabulation mentioned above. This supplementary tabulation covers these 13 metropolitan areas as well as other metropolitan areas and cities having a population of 100,000 or more according to the 1930 Census of Population.

TABLE 7.—*Comparison of Employment and Pay Rolls in Identical Establishments in February and March, 1941 by Principal Metropolitan Areas*

Metropolitan area	Number of establishments	Number on pay roll, March	Percentage change from February	Amount of pay roll (1 week), March	Percentage change from February
New York [1]	13,818	793,518	+2.1	$24,013,763	+3.4
Chicago [2]	4,346	509,466	+.5	15,232,190	+1.1
Philadelphia [3]	2,485	273,920	+1.4	8,174,909	+2.5
Detroit	1,634	304,213	+1.2	11,721,379	+1.5
Los Angeles [4]	2,856	221,544	+3.1	6,959,510	+3.8
Cleveland	1,316	162,799	+2.9	5,454,492	+4.5
St. Louis	1,400	154,373	+2.0	4,101,981	+3.0
Baltimore	1,112	135,637	+2.6	3,913,785	+3.4
Boston [5]	3,009	208,418	+2.2	5,866,950	+3.5
Pittsburgh	1,362	240,021	+.8	7,944,035	+2.9
San Francisco [6]	1,760	102,935	+2.5	3,370,835	+3.4
Buffalo	792	107,740	+4.0	3,429,414	+5.3
Milwaukee	976	118,956	+2.4	3,791,848	+3.8

[1] Does not include Elizabeth, Jersey City, Newark, or Paterson, N. J., or Yonkers, N. Y.
[2] Does not include Gary, Ind.
[3] Does not include Camden, N. J.
[4] Does not include Long Beach, Calif.
[5] Does not include Cambridge, Lynn, or Somerville, Mass.
[6] Does not include Oakland, Calif.

WAGE-RATE CHANGES IN AMERICAN INDUSTRIES

The following table gives information concerning wage-rate adjustments occurring during the month ending March 15, 1941, as shown by reports received from manufacturing and nonmanufacturing establishments which supply employment data to this Bureau.

As the Bureau's survey does not cover all establishments in an industry, and furthermore, as some firms may have failed to report wage-rate changes, these figures should not be construed as representing the total number of wage changes occurring in manufacturing and nonmanufacturing industries.

TABLE 8.—*Wage-Rate Increases Reported by Manufacturing and Nonmanufacturing Establishments During Month Ending March 15, 1941* [1] [2]

Group and industry	Establishments		Employees		Average percentage change in wage rates of employees having increase
	Total number reporting	Number reporting increase	Total number covered	Number having increase	
All manufacturing	33,900	296	6,826,322	109,041	6.7
Iron and steel group	2,574	47	989,717	19,216	6.9
Blast furnaces	349	5	531,220	4,360	5.6
Plumbers' supplies	104	3	27,663	1,391	8.0
Stamped and enameled ware	233	8	45,141	634	4.6
Steam fittings	110	4	39,102	2,562	5.3
Stoves	240	4	37,467	1,326	8.0
Tin cans	133	3	27,806	464	5.5
Tools	131	4	19,457	731	6.8
Wirework	156	3	28,775	1,286	5.2
Machinery group	3,811	105	1,040,444	16,869	6.6
Electrical machinery	578	15	288,942	7,477	5.8
Engines	70	4	72,485	1,228	8.9
Foundries	2,236	65	335,381	4,328	7.7
Machine tools	198	5	83,506	262	5.4
Radios	74	3	43,845	2,820	7.8
Textile machinery	126	3	22,205	93	10.1
Transportation group	770	13	824,526	8,374	9.4
Automobiles	415	7	478,578	4,560	9.1
Nonferrous group	1,102	24	242,082	5,116	6.8
Brass, bronze, and copper products	287	13	77,281	3,225	6.3
Lumber group	2,719	38	355,622	6,399	6.6
Furniture	719	6	105,590	2,942	5.7
Millwork	579	12	39,092	1,887	5.5
Sawmills	770	6	132,379	528	6.8
Stone group	1,621	26	216,307	9,198	3.5
Brick	545	4	42,796	263	4.9
Glass	151	7	68,882	6,690	2.3
Pottery	132	4	33,092	1,093	7.6
Textiles and their products:					
Fabrics	3,545	36	1,017,406	18,594	6.7
Cotton goods	828	8	421,671	7,014	7.3
Silk and rayon	420	3	59,195	406	6.8
Woolen and worsted goods	416	9	157,054	1,662	7.6
Wearing apparel	3,085	9	353,026	1,574	5.3
Leather group	1,082	7	245,677	3,611	4.1
Food group	5,417	25	424,232	7,996	8.6
Beverages	640	4	39,359	115	12.2
Canning	935	4	43,020	6,483	8.6
Slaughtering and meat packing	342	3	113,996	556	6.7
Tobacco group	231		70,088		
Paper group	4,073	26	392,115	2,785	5.2
Paper boxes	678	3	46,056	170	5.1
Paper and pulp	441	4	135,151	1,074	6.0
Printing:					
Book and job	1,626	10	84,678	1,240	4.7
Newspapers	745	6	65,083	152	3.3
Chemical group	2,358	25	353,236	6,060	8.0
Chemicals	242	6	70,877	4,496	8.2
Paints and varnishes	526	12	24,127	818	6.9
Rubber group	256	6	127,129	1,712	5.4
Rubber goods, other	204	5	49,904	1,699	5.4
Miscellaneous group	1,256	9	174,715	1,537	5.8
All nonmanufacturing (except building construction)	[3] 94,425	74	[3] 2,918,431	5,705	5.4
Metalliferous mining	[3] 361	7	[3] 67,939	631	5.1
Quarrying and nonmetallic mining	[3] 1,099	3	[3] 34,284	435	10.7
Electric light and power	[3] 2,847	18	[3] 246,213	2,207	4.9
Wholesale trade	[3] 15,157	12	[3] 338,068	229	12.3
Retail trade	[3] 54,127	15	[3] 984,738	130	11.6
Laundries	[3] 1,374	5	[3] 83,579	188	6.7
Brokerage	[3] 1,314	5	[3] 19,721	18	7.7
Insurance	[3] 2,684	3	[3] 124,160	19	5.0

[1] Figures are not given for some industries to avoid disclosure of information concerning individual establishments. They are, however, included where practicable in "all manufacturing," in "all nonmanufacturing," and in the various industry groups.

[2] No decreases reported.

[3] Approximate; based on previous month's sample.

Building Operations

REVIEW OF BUILDING CONSTRUCTION IN 1940

Trends in Building Construction Since 1921

THERE was a greater volume of building construction in 1940 than in any year since 1929 in the 257 identical cities which have been reporting to the Bureau of Labor Statistics since 1921. Permits were issued for more new housekeeping dwelling units during the past year than at any time since 1929. The trends in the various classes of buildings since 1921 are shown in the chart on page 1576.

The volume of residential and nonresidential building construction, measured in terms of permit valuation, increased nearly fivefold from the low levels of 1933 and 1934. The largest dollar improvement occurred between 1935 and 1936, when permit valuations for new residential construction more than doubled. The absolute increase was almost as great from 1939 to 1940. However, the large volume of new nonresidential construction in 1940, with permit valuations 80 percent higher than in 1939, was primarily responsible for this increase.

Despite the relatively high permit valuations for all types of building construction in the 257 cities during 1940, valuations were about 40 percent lower than in 1929 and 56 percent below the 1925 peak. Permit valuations in 1940 compared considerably less favorably with those in 1929 and 1925 in the case of new residential than in the case of new nonresidential construction, much of which represented defense building activity.

Permit valuations for additions, alterations, and repairs did not fluctuate so widely as those for the two classes of new construction during the period 1921 to 1940. At their peak in 1929, they totaled only 3.5 times as much as at the low point in 1932, whereas permit valuations for nonresidential construction were 8 times as great in 1925 as in 1934, and those for new residential construction were 31 times as great in 1925.

Building Construction in 2,397 Identical Cities, 1939 and 1940

Since the inauguration of its system of collecting information on building permits the Bureau has continuously expanded its sample

318651—41——16

of reporting cities. The following 3 tabulations have been compiled from information received from 2,397 cities with populations of 1,000 or more [1] which reported to the Bureau in both 1939 and 1940. Permits issued in the 257 cities which have been reporting to the Bureau since 1921 comprised almost two-thirds of the total permit valuations in the 2,397 cities in 1940.

Building-permit data are collected by the Bureau of Labor Statistics directly from local building officials except in the States of Illinois, Massachusetts, New Jersey, New York, North Carolina, and Pennsylvania, where State departments of labor collect and forward the data to the Bureau. In addition, the Bureau receives information on the value of contracts awarded by Federal and State governments.

Permit-valuation figures represent the estimates of construction costs made by prospective builders when applying for permits to build, in the case of privately financed construction, and the value of contracts awarded, in the case of construction financed by Federal and State governments. No land costs are included for either public or private building. Furthermore, the figures relate only to building construction within the corporate limits of the cities for which reports are received.

Building-permit valuations in the 2,397 cities were 26 percent higher in 1940 than in 1939. The outstanding change during the year was an increase of 69 percent for new nonresidential construction, which comprised nearly two-fifths of all building construction in 1940. New residential construction, which accounted for almost one-half of all permit valuations in 1940, showed a gain of only about 12 percent over 1939. Permit valuations for the remaining construction, comprising additions, alterations, and repairs, dropped about 2 percent between 1939 and 1940.

National defense activities in the latter half of 1940 exerted a strong influence on the pattern of building construction for the whole year. At the end of June, the 1940 permit valuations were running behind those for the first half of 1939. New residential construction in the first half of 1940 was greater than during the same months of 1939, but the lags in both other classes of construction—particularly in new nonresidential building—more than offset the better showing in new nonresidential construction. The permit valuations for the last 6 months of 1940 included almost $600,000,000 in contracts awarded by the Federal Government. A part of this was for United States Housing Authority and defense housing projects, but the bulk of it was for nonresidential construction. These large Federal expenditures for building in connection with the national defense

[1] The classifications used here and also the groupings by size of city are based upon the 1930 Census. Washington, D. C., has, however, been grouped with cities of 500,000 or more population. The reports cover all cities with a population of 50,000 or more; the completeness of the coverage of the remaining cities decreases directly with the size of city.

program were mainly responsible for the increased volume of construction in 1940 as compared with 1939. Federally financed building construction formed approximately $722,000,000 of the total permit valuations of $2,710,393,000 in the 2,397 reporting cities in 1940.

COMPARISON BY TYPE OF BUILDING

Permits issued for new buildings represented 87 percent of all permit valuations in 1940 and a little less than 84 percent in 1939. Although residential construction accounted for the major share of the new building in both years, this type of building declined from 55 percent of the total in 1939 to 49 percent in 1940.

The number and permit valuation of the various types of buildings for which permits were issued in the 2,397 cities during 1939 and 1940 are shown in table 1. Since a more complete analysis of new housekeeping-dwelling units in all nonfarm areas of the United States, in these 2 years, appeared in the April issue of the Monthly Labor Review, this article will deal primarily with developments in the field of new nonresidential building in 1939 and 1940.

TABLE 1.—*Permit Valuation and Number of Various Types of Buildings for Which Permits Were Issued in 2,397 Identical Cities, 1939 and 1940*

Type of building	Permit valuation			Buildings		
	Amount		Percent of change	Number		Percent of change
	1940	1939		1940	1939	
All types of buildings	$2,710,393,208	$2,149,959,230	+26.1	847,327	784,030	+8.1
New buildings	2,362,362,390	1,796,152,137	+31.5	426,111	371,421	+14.7
Residential buildings	1,311,826,836	1,175,341,275	+11.6	283,197	235,476	+20.3
1-family dwellings	1,003,559,290	835,862,761	+20.1	260,654	217,156	+20.0
2-family dwellings	71,878,314	56,866,278	+26.4	14,119	10,817	+30.5
1- and 2-family dwellings with stores combined	4,756,387	4,161,645	+14.3	909	922	−1.4
Multifamily dwellings	208,098,301	256,647,534	−18.9	6,899	6,012	+14.8
Multifamily dwellings with stores combined	3,315,570	4,779,608	−30.6	119	174	−31.6
Hotels	8,807,440	8,259,312	+6.6	151	114	+32.5
Lodging houses	503,052	289,840	+73.6	83	56	+48.2
All other	10,908,482	8,474,297	+28.7	263	225	+16.9
Nonresidential buildings	1,050,535,554	620,810,862	+69.2	142,914	135,945	+5.1
Amusement buildings	29,913,657	25,446,389	+17.6	1,732	1,644	+5.4
Churches	18,561,805	16,303,797	+13.8	1,161	1,014	+14.5
Factories and workshops	373,811,273	47,773,560	+682.5	3,531	2,740	+28.9
Public garages	9,196,302	8,535,329	+7.7	1,207	1,131	+6.7
Private garages	23,743,763	22,026,575	+7.8	92,733	87,805	+5.6
Service stations	20,651,003	18,403,828	+12.2	5,326	4,858	+9.6
Institutions	53,907,380	44,829,855	+20.2	293	306	−4.2
Office buildings	35,549,911	20,491,339	+73.5	715	513	+39.4
Public buildings	229,319,934	105,998,068	+116.3	873	573	+52.4
Public works and utilities	69,373,438	57,493,576	+20.7	964	787	+22.5
Schools and libraries	55,641,916	145,465,589	−61.7	566	942	−39.9
Sheds	5,163,063	5,281,147	−2.2	15,460	17,315	−10.7
Stables and barns	825,751	728,098	+13.4	568	684	−17.0
Stores and warehouses	121,200,969	99,597,844	+21.7	13,965	12,406	+12.6
All other	3,675,389	2,435,868	+50.9	3,820	3,227	+18.4
Additions, alterations, and repairs	348,030,818	353,807,093	−1.6	421,216	412,609	+2.1
On residential buildings:						
Housekeeping dwellings	141,030,229	132,991,100	+6.0	316,811	304,713	+4.0
Nonhousekeeping dwellings	4,733,301	4,551,381	+4.0	1,979	2,258	−12.4
On nonresidential buildings	202,267,288	216,264,612	−6.5	102,426	105,638	−3.0

VALUE OF BUILDING CONSTRUCTION
AS INDICATED BY BUILDING PERMITS
257 IDENTICAL CITIES
HUNDREDS OF MILLIONS OF DOLLARS
HUNDREDS OF MILLIONS OF DOLLARS
ADDITIONS, ALTERATIONS AND REPAIRS
NEW NONRESIDENTIAL BUILDINGS
NEW RESIDENTIAL BUILDINGS
45
40
35
30
25
20
15
10
5
0
1921
1922
1923
1924
1925
1926
1927
1928
1929
1930
1931
1932
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1940
UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

Nonresidential Buildings

Nonresidential buildings comprised 39 percent of the total permit valuations in 1940 as contrasted with only 29 percent in 1939. The increase of over 69 percent in the total permit valuation for this class of construction was accompanied by a rise of only 5 percent in the number of buildings to be constructed.

The greatest increase in permit valuations between 1939 and 1940—682 percent—was for factories and workshops. The number of new factory buildings, however, increased less than 29 percent. Factory construction not only showed the most improvement, but it was also the most important single class of nonresidential building in 1940, accounting for almost $374,000,000 of the $1,050,000,000 total for all nonresidential building in this year. Although permit valuations for factory buildings were higher during each of the first 7 months of 1940 than they had been during the corresponding months of 1939, it was not until August that the very marked increases took place.

Mention of a few of the largest contracts awarded for factory buildings by the Federal Government will suffice to show the importance of the defense activities in terms of new factory building. In August a $5,500,000 contract was awarded for an armored-tank plant in Detroit. Seven contracts awarded by the Navy during October for shipbuilding facilities totaled almost $60,000,000. During the same month the Navy let a contract for ordnance facilities at South Charleston, W. Va., to cost $12,000,000 and at Camden, N. J., to cost $2,900,000. The Government also awarded contracts in October for additional aircraft buildings at Wichita, Kans., at a cost of $5,000,000, and at Seattle, Wash., at a cost of $7,500,000.

During November the Government awarded contracts for increased steel-mill facilities at Bethlehem, Pa., to cost $22,300,000; for an ammonia plant at Morgantown, W. Va., to cost $15,000,000; for expansion of an aircraft plant at Long Beach, Calif., to cost $11,300,000; for shipbuilding facilities at Philadelphia, Pa., to cost $9,500,000; and for a shell-loading plant at Burlington, Iowa, to cost $9,500,000.

More Government contracts were awarded for factories during December than during any previous month of 1940. The largest contract was for an aircraft-engine factory at Dearborn, Mich., to cost nearly $22,000,000. Another contract, for expansion of an aircraft plant at San Diego, Calif., amounted to over $14,400,000. Six smaller contracts for aircraft plants throughout the country had a total value of more than $12,500,000. Six contracts for shipbuilding facilities accounted for an additional $9,700,000 in Federally financed construction. Contracts were also awarded in December for a small-arms ammunition plant at St. Louis, Mo., to cost $18,600,000 and for ordnance-plant expansion in Minneapolis to cost almost $5,500,000.

Public buildings were next in importance to factories and workshops during 1940 in the class of nonresidential construction. Permit valuations for such structures totaled $229,000,000, or about 116 percent more than in 1939. Contributing to this increase were the contracts let by the Federal Government in the latter part of 1940 for the construction of cantonment camps, replacement centers, and barracks to accomodate the increased military personnel that followed the enactment of the Selective Service Act of 1940.

The third largest class of nonresidential buildings in 1940 comprised stores and warehouses for which permit valuations amounted to more than $121,000,000. This represented an increase of 22 percent over the 1939 total. Permit valutations for structures of this type were more evenly distributed throughout the entire 12 months of 1940 than were those for either factories or public buildings. Moreover, valuations for individual stores or warehouses were not so large as some of those for factories and public buildings.

Buildings for public works and utilities were fourth in volume of permit valuations in 1940. The total of almost $69,400,000 was nearly 21 percent more than in 1939. Subway stations and auxiliary structures in Chicago, with permit valuations of approximately $3,700,000, constituted the largest project in this category. Permits were issued for a power plant and light station in Cleveland, Ohio, to cost about $2,600,000; for an electric generating plant at Alexandria, Va., to cost $1,500,000; and for a pumping station at Chicago, to cost $1,300,000. Federally financed construction in this classification included a pier at Bremerton, Wash., to cost $2,000,000; a pier and transit shed at San Diego, Calif., to cost $1,500,000; and a wharf at Oakland, Calif., to cost $1,000,000.

Schools and libraries led all other types of nonresidential buildings in permit valuations in 1939, but dropped to fifth place in 1940. The 1940 total of approximately $55,600,000 for schools and libraries was almost 62 percent less than the 1939 figure.

Additions, Alterations, and Repairs

The decrease of nearly 2 percent in permit valuations for additions and repairs to existing structures between 1939 and 1940 reflected a decline of over 6 percent in the permit valuations for changes in nonresidential buildings. Additions and repairs to housekeeping units were valued at 6 percent more in 1940 than in 1939 and those for nonhousekeeping residential units at 4 percent more, but the combined valuations of permits issued for all residential structures was only about two-fifths of the total value of additions, alterations, and repairs in 1940.

COMPARISON BY GEOGRAPHIC DIVISION

All geographic divisions except the East South Central contributed toward the countrywide increase of 26 percent, between 1939 and 1940, in permit valuations for building construction (table 2). The increases ranged from approximately 11 percent in the Middle Atlantic and Mountain States to 52 percent in the Pacific States.

The gain of 75 percent in new nonresidential building was wholly responsible for the better showing in the Middle Atlantic States. Permit valuations for both new residential building and additions, alterations, and repairs in this region decreased between 1939 and 1940. Although permits issued in New York City accounted for a little more than two-fifths of the total permit valuations in the Middle Atlantic region in both years, the increases outside New York City were proportionately greater than those in the metropolis. For the entire division there was a net increase in permit valuations in 1940 of approximately $64,000,000. More than $58,000,000 of this net increase was in the cities of Bethlehem and Chester, Pa., and Camden, Jersey City, and Kearny, N. J. Increased steel-mill facilities were responsible for the large permit valuations in Bethlehem. Contracts for shipbuilding facilities were the largest items in Kearny, Camden, and Chester, although figures for the latter two cities also included USHA-aided projects. Contracts were also awarded for a radio-equipment plant and for ordnance facilities in Camden. In Jersey City the major projects were nonindustrial in character and included a new hospital and nurses' home as well as two large USHA-aided projects.

The East North Central division, which showed an increase of almost 31 percent in 1940 as compared with 1939, was second to the Middle Atlantic division in volume of permit valuations both in 1939 and 1940. All three classes of construction shared the increase in this region, but the greatest proportionate gain was in new nonresidential buildings. In this region permit valuations were not so highly concentrated in a few localities as was the case in the Middle Atlantic States. Fourteen cities had total permit valuations in 1940 in excess of $5,000,000; the totals ranged from about $5,800,000 in Gary, Ind., to approximately $88,700,000 in Detroit. The 1940 valuations in each of these cities were higher than those in 1939, but the greatest proportionate increases were in Dearborn, Mich., Lockland, Ohio, and Evanston, Ill. In Dearborn permits were issued for single-family dwellings to cost almost $6,700,000, but a contract awarded for an aircraft-engine factory to cost nearly $22,000,000 accounted for most of the rise. A $28,500,000-contract awarded for an aircraft factory was almost wholly responsible for the large increase in Lockland. A school building to cost $4,500,000 was the principal building project undertaken in Evanston in 1940.

In the Pacific States permit valuations of $488,000,000 in 1940 were nearly 52 percent higher than in 1939. New nonresidential construction showed a gain of 137 percent and new residential building 29 percent, but permit valuations for additions, alterations, and repairs were 6 percent below the 1939 total. Fourteen cities, each of which had total permit valuations in excess of $5,000,000, accounted for 70 percent of total permit valuations in the Pacific division in 1940. Valuations ranged from about $5,200,000 in Spokane to $91,100,000 in Los Angeles. The largest proportionate increase was in Vallejo, Calif., where the total jumped from $924,000 in 1939 to $13,100,000 in 1940. Enlargement of the Navy Yard and defense housing undertaken by the Navy to accommodate additional workers accounted for most of this increase. Permit valuations in San Diego were more than four and a half times as large in 1940 as in 1939. A variety of buildings, most of which were in connection with the defense program, contributed to this increase. Expansion of an aircraft plant to cost over $14,400,000 was the largest single project, but large contracts were also awarded for a replacement center, a pier and transit shed at the Naval supply depot, and buildings at the destroyer base, the Naval training station, and the Navy Yard. Permits were also issued in San Diego for a large number of privately financed single-family dwellings, and contracts were awarded for 4,200 dwelling units in publicly financed housing projects to cost approximately $12,900,000. Permit valuations in Alameda, Calif., more than doubled between 1939 and 1940. Although the Navy awarded a $1,200,000 contract for a plane hangar, most of the construction there was in privately financed residential units.

The increase of 39 percent in permit valuations in the South Atlantic States brought the total for 1940 to more than $413,000,000. Although 21 cities in this area had permit valuations of more than $5,000,000 in 1940, in 5 of these cities the 1940 valuations were below the 1939 totals. The decreases were in the larger cities of Washington, Miami, Atlanta, Birmingham, and Richmond. Several of the smaller places, such as Radford, Va., South Charleston, W. Va., Spartanburg, S. C., and Morgantown, W. Va., experienced construction "booms" as a result of defense contracts. Radford is the site of a powder plant for which the contract value was almost $14,700,000. A $12,000,000 contract was awarded for Naval ordnance facilities to be constructed in South Charleston; 450 dwelling units in publicly financed housing were also started there in 1940. A replacement center was located by the Army at Spartansburg and 370 units of public housing were started. A Government contract for a $15,000,000 ammonia plant occasioned the increase in Morgantown.

In the New England, West North Central, and West South Central divisions permit valuations for both residential and nonresidential

building were higher in 1940 than in 1939. In the Mountain division, new residential building increased 31 percent, the greatest increase in any region, but nonresidential construction declined slightly. There was an 8-percent decrease in the East South Central section, which reflected substantially less new residential building in 1940 than in 1939 and slightly lower permit valuations for additions and repairs. There was some increase in new nonresidential building in these States.

Throughout most of the country the effect of Government contracts on building construction was similar to that in the four divisions with the highest permit valuations, which have been discussed above. More detailed information for all geographic divisions will be available in a forthcoming bulletin covering building construction for the period 1921 through 1940.

TABLE 2.—*Permit Valuation of Various Classes of Building Construction in 2,397 Identical Cities, by Geographic Division, 1939 and 1940*

Geographic division	Number of cities	Total construction			New residential buildings		
		1940	1939	Percent of change	1940	1939	Percent of change
All divisions	2,397	$2,710,393,208	$2,149,959,230	+26.1	$1,311,826,836	$1,175,341,275	+11.6
New England	153	181,346,615	138,790,625	+30.7	82,689,480	67,016,051	+23.4
Middle Atlantic	602	620,918,586	556,992,290	+11.5	282,004,484	318,654,418	−11.5
East North Central	506	554,069,562	423,732,437	+30.8	289,346,146	232,802,438	+24.3
West North Central	236	151,079,706	130,830,551	+15.5	64,243,696	56,242,823	+14.2
South Atlantic	280	413,085,268	297,699,278	+38.8	182,998,336	154,955,084	+18.1
East South Central	98	66,966,469	73,117,801	−8.4	34,454,909	41,659,828	−17.3
West South Central	149	170,909,235	150,183,083	+13.8	98,031,422	88,723,775	+10.5
Mountain	123	63,620,405	56,966,171	+11.7	35,236,625	26,854,265	+31.2
Pacific	250	488,397,362	321,646,994	+51.8	242,821,738	188,432,593	+28.9

Geographic division	New nonresidential buildings			Additions, alterations, and repairs			Population (census of 1930)
	1940	1939	Percent of change	1940	1939	Percent of change	
All divisions	$1,050,535,554	$620,810,862	+69.2	$348,030,818	$353,807,093	−1.6	62,478,948
New England	67,463,264	40,256,711	+67.6	31,193,871	31,517,863	−1.0	5,713,836
Middle Atlantic	240,623,054	137,662,867	+74.8	98,291,045	100,675,005	−2.4	19,067,157
East North Central	191,547,767	126,121,549	+51.9	73,175,649	64,808,456	+12.9	15,276,298
West North Central	64,462,037	47,600,555	+35.4	22,373,973	26,987,173	−17.1	4,771,439
South Atlantic	190,492,241	101,555,803	+87.6	39,594,691	41,188,391	−3.9	5,289,545
East South Central	22,484,545	21,061,241	+6.8	10,027,015	10,396,732	−3.6	2,160,591
West South Central	54,002,667	41,846,976	+29.0	18,875,146	19,612,332	−3.8	3,432,352
Mountain	20,004,999	20,539,957	−2.6	8,378,781	9,571,949	−12.5	1,330,548
Pacific	199,454,980	84,165,203	+137.0	46,120,644	49,049,198	−6.0	5,437,182

COMPARISON BY SIZE OF CITY

In cities in all size groups, from those with a population of 1,000 and under 2,500 to those with a population of 500,000 and more, permit valuations were higher in 1940 than in 1939, as shown in table 3.

The increases varied widely, however, from only 6 percent in places with a population of 2,500 to 5,000 to 52 percent in places of 5,000 to 10,000. All except the largest cities had higher permit valuations for new residential construction in 1940 than in 1939. Similarly, for new nonresidential buildings, all cities except those in the 2,500 to 5,000 class showed increases over 1939. In 3 city-size groups the 1940 permit valuations for this class of construction were more than double the 1939 totals. The location of the numerous large defense projects referred to above, was largely responsible for the pattern of changes between 1939 and 1940 in the 8 groups of cities.

TABLE 3.—*Permit Valuation of Various Classes of Building Construction in 2,397 Identical Cities, by Size of City, 1939 and 1940*

Size of city	Number of cities	Total construction			New residential buildings		
		1940	1939	Percent of change	1940	1939	Percent of change
All reporting cities	2,397	$2,710,393,208	$2,149,959,230	+26.1	$1,311,826,836	$1,175,341,275	+11.6
500,000 and over	14	790,660,255	693,357,262	+13.9	377,608,433	400,875,827	−5.8
100,000 and under 500,000	79	617,757,959	478,698,230	+29.0	296,053,763	258,054,566	+14.7
50,000 and under 100,000	98	289,509,462	202,246,988	+43.1	112,136,473	100,992,765	+11.0
25,000 and under 50,000	176	295,582,495	202,674,737	+45.8	127,789,739	103,121,005	+23.9
10,000 and under 25,000	488	356,312,873	298,975,816	+19.2	194,109,912	150,654,815	+28.8
5,000 apd under 10,000	439	217,404,038	143,203,952	+51.8	109,031,046	85,911,638	+26.9
2,500 and under 5,000	542	91,762,874	86,719,077	+5.8	59,732,995	48,010,876	+24.4
1,000 and under 2,500	561	52,003,252	44,083,168	+18.0	35,364,475	27,719,783	+27.6

Size of city	New nonresidential buildings			Additions, alterations, and repairs			Population (census of 1930)
	1940	1939	Percent of change	1940	1939	Percent of change	
All reporting cities	$1,050,535,554	$620,810,862	+69.2	$348,030,818	$353,807,093	−1.6	62,478,948
500,000 and over	297,300,747	178,576,499	+66.5	115,151,075	113,904,936	−1.1	21,449,853
100,000 and under 500,000	241,165,520	137,848,955	+74.9	80,538,676	82,794,709	−2.7	15,017,880
50,000 and under 100,000	139,565,968	62,533,989	+123.2	37,807,021	38,720,234	−2.4	6,499,274
25,000 and under 50,000	130,124,603	63,912,066	+103.6	37,668,153	35,641,666	+5.7	6,150,051
10,000 and under 25,000	117,902,101	99,134,448	+18.9	44,300,860	49,186,553	−9.9	7,428,680
5,000 and under 10,000	89,956,749	38,726,240	+132.3	18,416,243	18,566,074	−0.8	3,084,052
2,500 and under 5,000	22,340,135	28,781,335	−22.4	9,689,744	9,926,866	−2.4	1,948,454
1,000 and under 2,500	12,179,731	11,297,330	+7.8	4,459,046	5,066,055	−12.0	900,704

Construction From Federal Funds, 1939 and 1940

Federal expenditures for construction have not been limited to the types of construction previously discussed. The total value of all contracts awarded or force-account work started by the Federal Government for construction projects in 1939 and 1940 is shown in table 4. This tabulation, which covers all construction undertaken by the Federal Government both inside and outside the continental United States, shows valuations for 13 other types of construction projects in addition to residential and nonresidential buildings.

TABLE 4.—*Value of Contracts Awarded and Force-Account Work Started on Construction Projects Financed from Federal Funds, 1939 and 1940* [1]

Type of project	Total		Regular Federal appropriations	
	1940	1939 [2]	1940	1939 [2]
All types of projects	[3] $6,296,527,048	[4] $2,282,137,504	$6,016,267,754	$1,296,454,079
Airports [5]	113,313,230	4,752,921	111,913,406	873,891
Building: [6]				
Residential	[3] 246,940,818	[4] 231,070,689	73,396,873	1,038,119
Nonresidential	1,065,864,605	438,150,755	1,031,538,803	124,460,721
Electrification	97,923,095	130,044,708	88,993,995	100,616,066
Forestry	4,156,684	13,640,920	0	11,950
Heavy engineering	13,917,855	94,296,737	2,588,354	22,093
Hydro-electric power plants	7,060,274	22,804,087	0	0
Public roads [8]	339,132,054	266,573,425	336,833,955	230,246,090
Reclamation	68,994,015	115,612,233	60,084,687	85,096,726
River, harbor, and flood control	140,907,493	109,811,338	140,701,269	105,039,781
Ship construction and repair:				
Naval vessels	4,050,710,394	385,307,643	4,050,710,394	385,207,643
Other	86,774,981	209,955,459	86,774,981	209,875,448
Streets and roads [9]	25,778,901	89,128,444	11,804,612	7,757,730
Water and sewerage systems	16,219,321	118,131,218	4,401,681	1,560,978
Miscellaneous	18,833,328	52,856,927	16,524,744	44,646,843

Type of project	Federal agency Work Projects Administration funds		Public Works Administration funds	
	1940	1939 [2]	1940	1939 [2]
All types of projects	$38,499,869	$88,464,858	$75,054,272	$716,127,404
Airports [5]	944,731	2,305,000	455,093	1,574,030
Building: [6]				
Residential	2,061,306	231,357	4,777,486	48,710,050
Nonresidential	18,836,151	35,425,263	15,489,651	278,264,771
Electrification	2,500	32,076	8,926,600	29,396,566
Forestry	4,156,684	13,628,970	0	0
Heavy engineering	[7]	[7]	11,329,501	94,274,644
Hydro-electric power plants	1,722,750	620,365	5,337,524	22,183,722
Public roads [8]	1,334,444	2,484,820	963,655	33,842,515
Reclamation	6,244,180	24,219,857	2,665,148	6,295,650
River, harbor, and flood control	122,628	1,698,504	83,596	3,073,053
Ship construction and repair:				
Naval vessels	[7]	[7]	0	100,000
Other	0	0	0	80,011
Streets and roads [9]	563,934	2,263,267	13,410,355	79,107,447
Water and sewerage systems	325,997	589,918	11,491,643	115,980,322
Miscellaneous	2,184,564	4,965,461	124,020	3,244,623

[1] Preliminary; subject to revision.
[2] Revised.
[3] Includes $166,705,153 in contracts awarded for housing projects under the United States Housing Authority.
[4] Revised. Includes $181,091,163 in contracts awarded for housing projects under the United States Housing Authority.
[5] Exclusive of hangars and other buildings which are included under building construction.
[6] Data for building projects which were located in the cities reporting to the Bureau are also included in tables 1 to 3, inclusive.
[7] No appropriations made for this type of project.
[8] Grade crossing elimination and roads.
[9] Other than those for which contracts were awarded by the Public Roads Administration.

The total value of Federal construction projects in 1940 was two and three-quarter times as high as it was in 1939. By far the largest share of this increase was in contracts awarded for the construction and repair of naval vessels. The value of such work started in 1940 was in excess of $4,000,000,000, as compared with only a little more than $385,000,000 in 1939. There were also very large increases in the value of projected construction of nonresidential

buildings, airports, and public roads. Smaller increases were recorded for residential buildings and river, harbor, and flood-control projects. For the remaining nine categories of Federal construction included in table 5 the total contract values in 1940 were lower than in 1939.

Over 95 percent of the Federal construction projects undertaken in 1940 were to be financed from regular Federal appropriations in contrast to less than 57 percent in 1939. The value of projects of the Public Works Administration in 1940 was only about one-tenth as high as in 1939. Likewise, outlays from Federal agency Work Projects Administration funds were reduced by more than one-half between 1939 and 1940.

SUMMARY OF BUILDING CONSTRUCTION IN PRINCIPAL CITIES, APRIL 1941 [1]

APRIL building-construction activity as measured by permits issued showed a seasonal gain of 38.7 percent over the preceding month. An increase of 37.5 percent in residential permit valuations was the largest April gain in 12 years. All city-size groups shared in the increased residential building activity. Gains ranged from 26.1 percent in the group of cities with a population of 500,000 and over to 56.1 percent in the group of cities with a population of 25,000 and under 50,000. Permit valuations of new nonresidential construction were 52.1 percent higher than in March. Additions and alterations to existing structures showed a gain of 14.7 percent.

Substantial gains over April 1940 were reported for all types of building construction. All types combined were 42.0 percent higher than in the same month a year ago. New residential construction showed a gain of 29.5 percent and nonresidential rose 96.6 percent from April 1940. Permit valuations of additions and alterations to existing structures increased 4.8 percent.

Comparison of April 1941 with March 1941 and April 1940

A summary of building construction in 2,134 identical cities in April, 1941, with percentage changes from March 1941 and April 1940 is given in table 1.

A summary of permit valuations and the number of family dwelling units provided in new dwellings in 2,134 identical cities, having a population of 1,000 and over, is shown in table 2 for April 1941 with percentage changes from March 1941 and April 1940.

[1] More detailed information by geographic division and individual cities is given in a separate pamphlet entitled "Building Construction, April 1941," copies of which will be furnished upon request.

TABLE 1.—*Summary of Building Construction for Which Permits Were Issued in 2,134 Identical Cities, April 1941*

Class of construction	Number of buildings			Permit valuation		
	April 1941	Percentage change from—		April 1941	Percentage change from—	
		March 1941	April 1940		March 1941	April 1940
All construction	91,698	+40.6	+9.7	$289,376,796	+38.7	+42.0
New residential	32,196	+35.3	+22.7	157,730,984	+37.5	+29.5
New nonresidential	15,232	+50.8	+5.9	97,762,340	+52.1	+96.6
Additions, alterations, and repairs	44,270	+41.4	+3.0	33,883,472	+14.7	+4.8

TABLE 2.—*Number and Permit Valuation of New Dwelling Units in 2,134 Identical Cities, April 1941, by Type of Dwelling*

Type of dwelling	Permit valuation			Number of dwelling units		
	April 1941	Percentage change from—		April 1941	Percentage change from—	
		March 1941	April 1940		March 1941	April 1940
All types	$155,774,688	+37.7	+30.0	42,487	+38.5	+25.1
1-family	116,735,617	+34.2	+25.3	29,279	+34.8	+21.1
2-family [1]	6,615,009	−2.5	−.9	2,609	+1.0	−2.9
Multifamily [2]	32,424,062	+67.7	+62.5	10,599	+66.2	+49.2

[1] Includes 1- and 2-family dwellings with stores.
[2] Includes multifamily dwellings with stores.

Construction During First 4 Months, 1940 and 1941

Cumulative totals for the first 4 months of 1941 compared with the same months of the preceding year are shown in table 3. The data are based on reports received from cities having a population of 1,000 and over.

TABLE 3.—*Permit Valuation of Building Construction, First 4 Months of 1940 and 1941, by Class of Construction* [1]

Class of construction	Permit valuation, first 4 months of—		Percentage change
	1941	1940	
All construction	$853,067,906	$635,799,553	+34.2
New residential	456,462,899	363,990,315	+25.4
New nonresidential	286,119,076	168,140,186	+70.2
Additions, alterations, and repairs	110,485,931	103,669,052	+6.6

[1] Based on reports from cities with a population of 1,000 and over, the cities being identical for any given month of both years.

Table 4 presents the permit valuation and number of family-dwelling units provided in cities with a population of 1,000 and over, for the first 4 months of 1940 and 1941.

TABLE 4.—*Number and Permit Valuation of New Dwelling Units, First 4 Months of 1940 and 1941, by Type of Dwelling* [1]

Type of dwelling	Permit valuation, first 4 months of—		Percentage change	Number of dwelling units, first 4 months of—		Percentage change
	1941	1940		1941	1940	
All types	$451,601,897	$360,025,950	+25.4	124,844	101,984	+22.4
1-family	322,027,862	264,047,300	+22.0	81,023	69,359	+16.8
2-family [2]	19,573,308	18,248,886	+7.3	7,669	7,421	+3.3
Multifamily [3]	119,000,727	77,729,764	+42.8	36,152	25,204	+43.4

[1] Based on reports from cities with a population of 1,000 and over, the cities being identical for any given month of both years.
[2] Includes 1- and 2-family dwellings with stores.
[3] Includes multifamily dwellings with stores.

Analysis by Size of City, April 1941

Table 5 shows the value of permits issued for building construction in April 1941 with percentage changes from March 1941 and April 1940, by size of city and by class of construction.

TABLE 5.—*Permit Valuation of Various Classes of Building Construction in 2,134 Identical Cities, April 1941, by Size of City*

Size of city	Number of cities	Total construction			New residential buildings		
		Permit valuation, April 1941	Percentage change from—		Permit valuation, April 1941	Percentage change from—	
			March 1941	April 1940		March 1941	April 1940
Total, all reporting cities	2,134	$289,376,796	+38.7	+42.0	$157,730,984	+37.5	+29.5
500,000 and over	14	108,805,631	+84.8	+52.3	43,349,443	+26.1	+13.0
100,000 and under 500,000	78	60,280,436	+16.5	+42.8	38,783,202	+41.6	+47.7
50,000 and under 100,000	104	31,717,636	+17.9	+48.0	18,553,608	+40.9	+58.9
25,000 and under 50,000	192	32,563,367	+15.9	+27.2	20,845,644	+56.1	+29.7
10,000 and under 25,000	462	31,117,822	+33.9	+37.3	18,160,537	+38.6	+23.6
5,000 and under 10,000	426	15,183,432	+34.8	+20.0	11,657,604	+37.1	+20.5
2,500 and under 5,000	434	6,471,170	(1)	+18.6	4,621,967	+26.9	+27.3
1,000 and under 2,500	424	3,237,302	+63.1	+37.8	1,758,979	+43.0	+28.0

Size of city	New nonresidential buildings			Additions, alterations, and repairs			Population (census of 1940)
	Permit valuation, April 1941	Percentage change from—		Permit valuation, April 1941	Percentage change from—		
		March 1941	April 1940		March 1941	April 1940	
Total, all reporting cities	$97,762,340	+52.1	+96.6	$33,883,472	+14.7	+4.8	64,258,810
500,000 and over	54,158,705	+278.3	+128.8	11,297,483	+10.9	+20.3	22,367,825
100,000 and under 500,000	13,412,511	−21.8	+78.2	8,084,723	+12.2	−4.1	15,620,164
50,000 and under 100,000	8,694,747	−14.9	+53.7	4,469,281	+27.1	+9.2	7,126,598
25,000 and under 50,000	7,594,437	−33.5	+68.9	4,123,286	+24.2	−18.0	6,765,517
10,000 and under 25,000	9,304,944	+38.7	+100.6	3,652,341	+6.6	+9.6	7,112,041
5,000 and under 10,000	2,208,973	+44.1	+21.8	1,316,855	+6.8	+12.9	3,007,915
2,500 and under 5,000	1,168,745	−50.8	+.5	680,458	+49.7	+2.6	1,554,402
1,000 and under 2,500	1,219,278	+119.9	+62.1	259,045	+29.7	+16.4	704,348

[1] Decrease of less than 1/10 of 1 percent.

The permit valuation and number of new dwelling units provided, by type of dwelling and size of city, in the 2,134 identical cities reporting for March and April 1941, are given in table 6.

TABLE 6.—*Number and Permit Valuation of New Dwelling Units in 2,134 Identical Cities, April 1941, by Size of City and Type of Dwelling*

Size of city	Permit valuation of housekeeping dwellings			Number of families provided for in—							
	April 1941	March 1941	Percentage change	All types		1-family dwellings		2-family dwellings [1]		Multifamily dwellings [2]	
				Apr. 1941	Mar. 1941	Apr. 1941	Mar. 1941	Apr. 1941	Mar. 1941	Apr. 1941	Mar. 1941
Total, all reporting cities	$155,774,688	$113,099,984	+37.7	42,487	30,681	29,279	21,719	2,609	2,584	10,599	6,378
500,000 and over	42,650,643	34,244,942	+24.5	10,580	8,842	5,846	5,023	651	683	4,083	3,136
100,000 and under 500,000	38,440,952	26,567,807	+44.7	11,214	7,684	6,828	5,113	1,124	858	3,262	1,713
50,000 and under 100,000	18,268,600	13,047,760	+40.0	5,281	3,670	3,652	2,530	260	318	1,369	822
25,000 and under 50,000	20,703,744	12,887,242	+60.7	6,184	3,533	4,657	2,783	235	437	1,292	313
10,000 and under 25,000	17,935,999	13,007,601	+37.9	4,709	3,452	4,301	3,047	184	140	224	265
5,000 and under 10,000	11,466,854	8,498,422	+34.9	2,907	2,221	2,449	3,052	107	88	351	81
2,500 and under 5,000	4,563,467	3,627,817	+25.8	1,168	955	1,117	863	36	47	15	45
1,000 and under 2,500	1,744,429	1,218,393	+43.2	444	324	429	308	12	13	3	3

[1] Includes 1- and 2-family dwellings with stores.
[2] Includes multifamily dwellings with stores.

The information on building permits issued is based on reports received by the Bureau of Labor Statistics from 2,134 identical cities having a population of 1,000 and over.

The information is collected by the Bureau of Labor Statistics from local building officials, except in the States of Illinois, Massachusetts, New Jersey, and Pennsylvania, where the State departments of labor collect and forward the information to the Bureau. In New York and North Carolina the information from the smaller cities is collected by the Bureau of Labor Statistics from local building officials and the information from the larger cities is collected and forwarded to the Bureau by the State departments of labor. The permit valuations shown in this report are estimates made by prospective builders on applying for permits to build. No land costs are included. Only building projects within the corporate limits of the cities enumerated are included in the Bureau's tabulation. The data collected by the Bureau of Labor Statistics show, in addition to private and municipal construction, the value of buildings for which contracts were awarded by the Federal and State Governments in the cities included in the report. For April 1941 the value of these buildings amounted to $77,397,000, for March 1941 to $28,179,000, and for April 1940 to $18,151,000.

Construction from Public Funds

The value of contracts awarded and force-account work started during April 1941, March 1941, and April 1940 on construction projects financed wholly or partially from various Federal funds is shown in table 7.

TABLE 7.—*Value of Contracts Awarded and Force-Account Work Started on Construction Projects Financed from Federal Funds, March and April 1941 and April 1940* [1]

Federal agency	Contracts awarded and force-account work started		
	April 1941	March 1941 [2]	April 1940 [2]
Total	$227,973,943	$768,183,054	$102,436,525
Public Works Administration:			
Federal	0	150,329	396,747
Non-Federal:			
N. I. R. A.	0	6,728	229,041
E. R. A. A.	0	2,327,450	1,096,860
P. W. A. A., 1938	0	142,980	4,355,005
Federal agency projects under the WPA	101,289	22,337	109,273
Regular Federal appropriations	202,378,133	756,801,158	86,624,624
United States Housing Authority	25,494,521	8,732,072	9,624,975

[1] Preliminary, subject to revision.
[2] Revised.

The value of public-building and highway construction awards financed wholly from appropriations from State funds, as reported by the various State governments for April 1941, March 1941, and April 1940 is shown in the following statement:

	Public buildings	*Highway construction*
April 1941	$1,034,318	[1] $9,176,658
March 1941	1,511,742	7,041,671
April 1940	1,678,168	10,176,529

[1] Revised figures to include Texas will be published in the next issue of the Monthly Labor Review.

Retail Prices

FOOD PRICES IN APRIL 1941

RETAIL costs of food advanced 2.2 percent between March 18 and April 15 in a general move reported from all sections of the country. Prices of all groups of food rose following earlier increases in wholesale markets. Particularly sharp advances were reported for fresh fruits and vegetables, flour, sugar, lard, butter, pork chops, and eggs. Factors contributing to these increases were rainy weather conditions and a late January frost in some sections of the fruit- and vegetable-growing areas, uncertainty concerning shipping facilities for sugar, increased Government buying for foreign and domestic use, and the policy of the United States Department of Agriculture in encouraging production by purchases at higher prices. Preliminary reports for April 29, 1941, for 18 cities indicate further advances in retail food prices.

Retail prices of food have been rising moderately but steadily since last November, and prices are now 5 percent higher than last autumn and 4.6 percent higher than a year ago. The Bureau's index of retail prices of 54 foods was 0.6 percent above the 1935–39 average on April 15, 1941, and 7.6 percent above the level of August 1939, the month before the outbreak of the European war. Prices for certain cuts of meats, eggs, butter, lard, and some of the fresh fruits and vegetables ranged from 10 to 20 percent above April 1940. Sugar prices were 7 percent above last April.

Details by Commodity Groups

Prices of flour advanced again this month by 3.4 percent but were still 4.6 percent below the level of April last year. White bread prices remained unchanged for the month in all 51 cities except Minneapolis and St. Paul, where a general reduction of 2 cents per loaf went into effect, and Dallas, where most loaves were 1 cent higher. On the average, bread prices were 4.9 percent lower than for a year earlier. Other changes reported for cereals and bakery products for the month were declines of 1.1 percent for rye bread, 2.7 percent for soda crackers, and 1.4 percent for corn flakes, and an increase of 2.4 percent for corn meal.

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Costs of meats sold at retail advanced 1 percent between March 18 and April 15, due to increases of 4.4 percent in the prices for pork chops, 2 percent for cured pork, 1 percent for lamb, and 3.4 percent for chickens. Prices of cured pork, which were unusually low in April 1940, are now at about the same level as in 1939. Although cattle slaughter during the first quarter of this year was 5 percent larger than last year, prices at wholesale and retail have been considerably higher in response to an improved consumer demand. A similar situation holds true for chickens, although not to the same extent. Prices of fresh and frozen fish were moderately higher in April 1941 than they were a month ago or a year ago, while prices of canned pink salmon have been advancing recently and are now 7 percent higher than a year earlier, when supplies were somewhat heavier.

Costs of dairy products increased 1.6 percent between mid-March and mid-April, largely as a result of a 5-percent rise in butter prices. This advance was general, higher prices being reported from all 51 cities included in the Bureau's food-price survey. Milk prices rose in 4 cities during the March-April period, and prices of cheese advanced an average of about 1 percent. The influence of the recently announced policy of the Department of Agriculture was reflected to some extent in retail prices of these foods as of April 15.

An increase of 3.1 cents per dozen in the average retail price of eggs between March 18 and April 15 followed a wholesale-price advance of from 4 to 5 cents per dozen from mid-March to early April. This rise was due in part to smaller receipts at principal markets and in part to larger retail purchases.

Retail prices of fresh fruits and vegetables advanced 4.5 percent on the average between March 18 and April 15, with prices for most items higher. Marked increases were reported for lettuce, onions, and potatoes, all of which, however, are currently selling below the level of last year. Supplies of potatoes are still large as compared with a year ago, notwithstanding a program inaugurated by the Surplus Marketing Administration in February for the diversion of several million bushels of the 1941 crop into livestock feed and for an increase in the Maine starch diversion allotment, supplementing the food-stamp plan and programs for direct purchases of potatoes for relief distribution. Most truck crops have suffered from heavy rains during the growing season and a severe frost in late January, resulting in smaller production and higher prices than in April 1940. Although marketings of apples and oranges were large, prices rose and the average cost of fresh fruit was 3.6 percent higher on April 15 than a month earlier. As compared with a year ago, prices of apples were 7.7 percent higher in April 1941, bananas 16 percent higher, and oranges 1.5 percent lower. Prices of canned and dried fruits and vegetables advanced during the past month, canned corn showing an increase

of 1 percent and navy beans 1½ percent. Prices of prunes declined 1 percent.

Costs of fats and oils at retail advanced by 4.7 percent between mid-March and mid-April as a result of a 15.6-percent rise in lard prices and smaller increases for vegetable shortening, oleomargarine, and peanut butter. Lard prices in wholesale markets are showing the effects of increased exports, lower production, larger domestic consumption, purchases by the Government, and increased prices of other fats and oils, particularly imported products affected by the shipping situation.

The average retail prices of coffee and sugar advanced 2.3 percent and 6.6 percent, respectively, during the month.

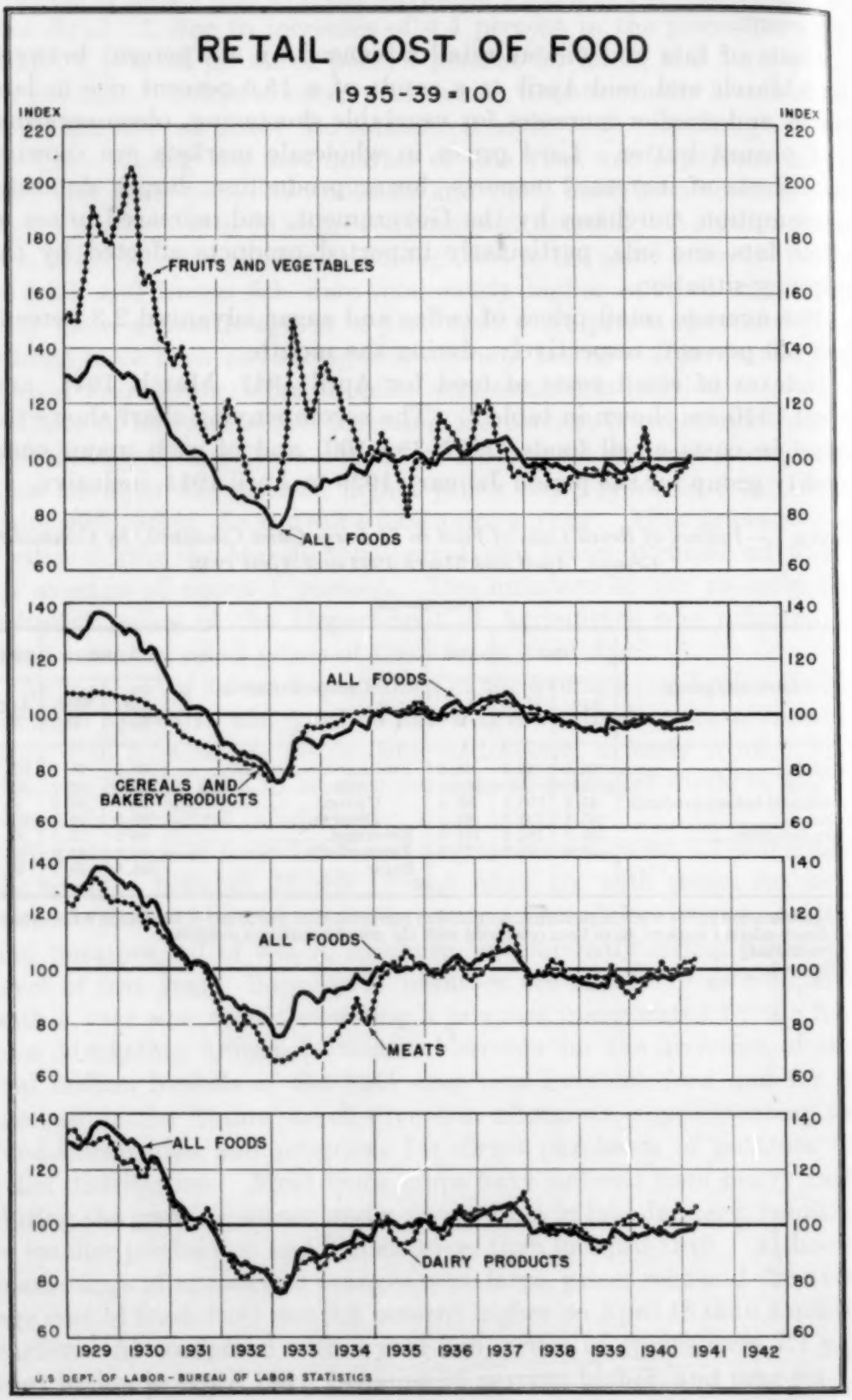
Indexes of retail costs of food for April 1941, March 1941, and April 1940 are shown in table 1. The accompanying chart shows the trend in costs of all foods (1935–39=100) and of each major commodity group for the period January 1929 to April 1941, inclusive.

TABLE 1.—*Indexes of Retail Costs of Food in 51 Large Cities Combined,*[1] *by Commodity Groups, April and March 1941 and April 1940*

[1935–39=100]

Commodity group	1941		1940	Commodity group	1941		1940
	Apr. 15[2]	Mar. 18	Apr. 16		Apr. 15[2]	Mar. 18	Apr. 16
All foods	100.6	98.4	96.2	Fruits and vegetables	100.6	97.1	101.3
				Fresh	102.5	98.1	103.4
Cereals and bakery products	95.2	[3] 95.1	98.4	Canned	93.1	92.5	92.9
Meats	103.5	102.5	93.1	Dried	100.0	99.3	100.8
Dairy products	106.3	104.6	101.0	Beverages	95.0	93.5	93.7
Eggs	92.0	83.0	77.7	Fats and oils	85.1	81.3	82.8
				Sugar	104.6	98.1	97.8

[1] Aggregate costs of 54 foods in each city, weighted to represent total purchases of families of wage earners and lower-salaried workers, have been combined with the use of population weights.
[2] Preliminary.
[3] Revised.


RETAIL COST OF FOOD
1935-39 = 100
INDEX
INDEX
220
200
180
160
140
120
100
80
60
FRUITS AND VEGETABLES
ALL FOODS
ALL FOODS
CEREALS AND BAKERY PRODUCTS
ALL FOODS
MEATS
ALL FOODS
DAIRY PRODUCTS
1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942
U.S. DEPT. OF LABOR - BUREAU OF LABOR STATISTICS

Prices of 31 of 54 foods included in the index were higher in April 1941 than in March, while 8 were lower, and 15 showed no change. Compared with April of last year, 31 foods were quoted at higher prices in April 1941, 20 at lower prices, and 3 at the same prices. Average prices of each of 63 foods for 51 cities combined are shown in table 2 for April and March 1941, and April 1940.

TABLE 2.—*Average Retail Prices of 63 Foods in 51 Large Cities Combined, April and March 1941 and April 1940*

Article		1941		1940
		April 15 [1]	March 18	April 16
Cereals and bakery products:				
Cereals:		*Cents*	*Cents*	*Cents*
Flour, wheat	10 pounds	43.1	41.7	45.2
Macaroni	pound	13.8	13.8	14.2
Wheat cereal [2]	28-ounce package	23.4	23.4	23.7
Corn flakes	8-ounce package	7.1	7.2	7.1
Corn meal	pound	4.3	4.2	4.2
Rice [2]	do	8.3	8.1	7.9
Rolled oats [2]	do	7.1	7.1	7.2
Bakery products:				
Bread, white	do	7.8	7.8	8.2
Bread, whole wheat	do	8.8	8.8	9.0
Bread, rye	do	9.0	9.1	9.5
Vanilla cookies	do	25.3	25.3	25.4
Soda crackers	do	14.6	15.0	15.0
Meats:				
Beef:				
Round steak	do	38.0	38.0	34.1
Rib roast	do	31.2	31.2	27.9
Chuck roast	do	24.9	25.1	21.9
Veal: Cutlets	do	45.3	46.2	41.2
Pork:				
Chops	do	30.9	29.6	27.6
Bacon, sliced	do	32.6	32.0	26.1
Ham, sliced [2]	do	46.6	46.5	42.4
Ham, whole	do	28.1	27.6	23.1
Salt pork	do	18.1	17.8	13.5
Lamb:				
Leg	do	27.9	27.7	28.7
Rib chops	do	35.5	35.3	36.4
Poultry: Roasting chickens	do	33.2	32.1	29.9
Fish:				
Fresh, frozen	do	[3]	[3]	[3]
Salmon, pink	16-ounce can	16.5	16.2	15.4
Salmon, red [2]	do	27.2	26.9	25.6
Dairy products:				
Butter	pound	39.5	37.6	34.9
Cheese	do	27.0	26.7	26.0
Milk, fresh (delivered)	quart	13.0	13.0	12.8
Milk, fresh (store)	do	12.0	11.9	11.6
Milk, fresh (delivered and store) [2]	do	12.7	12.7	12.4
Milk, evaporated	14½-ounce can	7.1	7.1	7.0
Eggs	dozen	32.5	29.4	27.3
Fruits and vegetables:				
Fresh:				
Apples	pound	5.6	5.3	5.2
Bananas	do	7.3	7.0	6.3
Oranges	dozen	27.7	27.5	28.1
Beans, green	pound	16.5	20.2	12.0
Cabbage	do	5.2	5.0	4.0
Carrots	bunch	5.3	5.3	5.0
Lettuce	head	9.4	8.1	10.0
Onions	pound	4.9	3.6	5.5
Potatoes	15 pounds	31.8	29.6	42.7
Spinach	pound	6.7	7.0	5.8
Sweetpotatoes	do	5.4	5.3	4.7

See footnotes at end of table.

TABLE 2.—*Average Retail Prices of 63 Foods in 51 Large Cities Combined, April and March 1941 and April 1940*—Continued

Article		1941		1940
		April 15 [1]	March 18	April 16
Fruits and vegetables—Continued.				
Canned:		*Cents*	*Cents*	*Cents*
Peaches	No. 2½ can	16.6	16.6	17.2
Pineapple	do	21.0	21.0	21.0
Beans, green [2]	No. 2 can	10.4	10.2	10.1
Corn	do	11.0	10.9	10.5
Peas	do	13.4	13.4	13.8
Tomatoes	do	8.5	8.5	8.5
Dried:				
Prunes	pound	9.4	9.5	9.7
Navy beans	do	6.6	6.5	6.5
Beverages:				
Coffee	do	21.9	21.4	21.6
Tea	¼ pound	17.7	17.7	17.4
Cocoa [2]	8-ounce can	9.1	9.1	9.1
Fats and oils:				
Lard	pound	11.1	9.6	9.3
Shortening, other than lard:				
In cartons	do	12.0	11.5	11.9
In other containers	do	18.7	18.4	19.3
Salad dressing	pint	20.1	20.1	21.1
Oleomargarine	pound	15.7	15.6	16.0
Peanut butter	do	17.8	17.7	17.9
Sugar and sweets:				
Sugar	10 pounds	56.2	52.7	52.6
Corn sirup [2]	24-ounce can	13.6	13.6	13.4
Molasses [2]	18-ounce can	13.4	13.4	13.5

[1] Preliminary.
[2] Not included in index.
[3] Composite prices not computed.

Details by Regions and Cities

A rise in the average cost of food during the month was reported from all 51 cities covered by the Bureau's survey. Increases of 3 percent or more were reported for 14 cities, the largest advances occurring in Bridgeport (3.9 percent), Denver (3.7 percent), New Haven (3.6 percent), and Louisville (3.6 percent). In these 4 cities the higher average costs were due to the greater-than-average advances for dairy products, fruits and vegetables, and fats and oils. The smallest increases in average food costs were shown in Minneapolis (1.3 percent), where bread prices declined considerably, and in Washington, D. C. (1.4 percent), and Norfolk (1.5 percent). In all of these cities advances for fruits and vegetables and meats were smaller than in other parts of the country.

Indexes of food costs by cities are presented in table 3 for April and March 1941 and April 1940.

TABLE 3.—*Indexes of the Average Retail Cost of All Foods, by Cities,*[1] *April and March 1941 and April 1940*

[1935-39=100]

Region and city	1941		1940	Region and city	1941		1940
	Apr. 15[2]	Mar. 18	Apr. 16		Apr. 15[2]	Mar. 18	Apr. 16
United States	100.6	98.4	96.2	South Atlantic:			
New England:				Atlanta	99.7	96.7	92.7
Boston	98.3	96.1	97.8	Baltimore	101.5	99.1	97.7
Bridgeport	100.6	96.8	96.9	Charleston, S. C.	98.2	96.1	95.1
Fall River	100.4	98.4	98.0	Jacksonville	101.7	99.0	96.3
Manchester	99.5	97.2	98.4	Norfolk	102.1	100.6	93.3
New Haven	99.8	96.3	96.1	Richmond	97.9	94.9	91.7
Portland, Maine	97.2	94.5	93.5	Savannah	103.0	100.7	97.1
Providence	99.2	97.0	97.1	Washington, D. C.	100.7	99.3	96.7
Middle Atlantic:				East South Central:			
Buffalo	103.2	100.8	98.1	Birmingham	97.0	95.3	[3] 91.4
Newark	101.9	99.2	98.6	Louisville	99.7	96.2	93.6
New York	101.6	99.8	98.9	Memphis	98.2	95.6	92.4
Philadelphia	97.0	95.2	94.2	Mobile	102.9	99.8	[3] 96.5
Pittsburgh	101.1	98.5	94.7	West South Central:			
Rochester	103.1	[3] 100.1	98.7	Dallas	95.7	93.5	90.4
Scranton	100.4	97.6	97.6	Houston	104.2	102.1	97.3
East North Central:				Little Rock	98.4	95.6	95.6
Chicago	100.5	98.4	96.4	New Orleans	105.9	102.9	101.2
Cincinnati	100.1	97.6	92.7	Mountain:			
Cleveland	102.1	[3] 100.3	96.1	Butte	101.3	98.3	96.3
Columbus, Ohio	96.9	94.0	91.3	Denver	98.6	95.1	94.7
Detroit	101.3	98.4	96.4	Salt Lake City	101.0	98.4	95.7
Indianapolis	101.1	98.8	95.4	Pacific:			
Milwaukee	99.2	96.3	93.8	Los Angeles	102.7	100.8	95.1
Peoria	103.5	100.3	96.3	Portland, Oreg.	105.5	102.8	97.6
Springfield, Ill.	100.3	97.0	95.4	San Francisco	103.5	100.6	95.8
West North Central:				Seattle	104.7	102.4	98.9
Kansas City	97.4	94.8	91.6				
Minneapolis	101.5	100.2	94.9				
Omaha	100.4	97.4	95.3				
St. Louis	101.4	99.5	95.1				
St. Paul	99.6	98.0	94.6				

[1] Aggregate costs of 54 foods in each city, weighted to represent total purchases of families of wage earners and lower-salaried workers, have been combined for the United States with the use of population weights. Primary use is for time-to-time comparisons rather than place-to-place comparisons.
[2] Preliminary.
[3] Revised.

COAL PRICES IN MARCH 1941

RETAIL prices of coal advanced slightly on the average between December 15, 1940, and March 15, 1941. Prices of bituminous coal rose 0.2 percent while Pennsylvania anthracite showed increases ranging from 0.2 percent for buckwheat to 0.6 percent for chestnut. Prices of Arkansas anthracite advanced also by 0.2 percent.

As compared with a year ago, bituminous coal was 2.7 percent higher in March 1941, and prices of Pennsylvania anthracite ranged from 2.6 percent to 4.8 percent higher. Arkansas anthracite advanced 3.5 percent since March 1940. There were no changes in prices of Colorado and New Mexico anthracite.

Average prices of coal, together with indexes for bituminous coal and Pennsylvania anthracite based on the 3-year period October 1922 through September 1925 as 100, are presented in table 4 for March 1941 and December and March 1940.

TABLE 4.—*Average Retail Prices of Coal in Large Cities Combined, March 1941 and December and March 1940*

Kind of coal	Average retail price per ton of 2000 pounds			Index of retail price (October 1922–September 1925=100)			Percentage change Mar. 15, 1941, compared with—	
	1941	1940		1941	1940		1940	
	Mar. 15[1]	Dec. 15	Mar. 15	Mar. 15[1]	Dec. 15	Mar. 15	Dec. 15	Mar. 15
Bituminous coal (35 cities), old series[2]	$8.88	$8.86	[3] $8.65	90.3	90.2	[3] 89.0	+0.2	+2.7
Pennsylvania anthracite (25 cities), new series:[4]								
Stove	11.63	11.59	11.31	82.7	82.4	80.4	+.3	+2.8
Chestnut	11.66	11.59	11.37	83.0	82.5	81.0	+.6	+2.6
Pea	9.70	9.65	9.34	------	------	------	+.5	+3.9
Buckwheat	8.31	8.29	7.93	------	------	------	+.2	+4.8
Western anthracite:								
Arkansas (7 cities)	12.88	[5] 12.86	[6] 12.45	------	------	------	+.2	+3.5
Colorado (1 city)	15.81	15.81	15.81	------	------	------	0	0
New Mexico (1 city)	23.86	23.86	23.86	------	------	------	0	0

[1] Preliminary.
[2] Unweighted average. Weighted composite prices are in preparation.
[3] 38 cities.
[4] Weighted on the basis of the distribution by rail or rail and tidewater to each city during the 12-month period from Aug. 1, 1935, to July 31,1936.
[5] Revised.
[6] 8 cities.

Details by Kinds of Coal [1]

There was practically no change in the average price of coal between February 15, 1941, and March 15, 1941, and only a few minor changes between December 15, 1940, and March 15, 1941. The greatest changes for the 3-month period were advances of 29 cents per ton for Western high-volatile stoker coal in Seattle, and of 29 cents per ton for Pennsylvania anthracite, stove and chestnut sizes, in Philadelphia. Declines ranging from 1 to 11 cents per ton for certain kinds of coal were reported for a few cities.

Anthracite.—As compared with a year ago, prices of Pennsylvania anthracite advanced in 21 of 26 cities in March 1941. The greatest increase was $1 per ton for the pea size in Bridgeport. Other advances for the pea size ranging from 50 to 75 cents per ton were reported from Boston, Portland (Maine), New York, and Baltimore. Prices of stove and chestnut sizes also advanced slightly more than 50 cents per ton in Bridgeport, Cleveland, and Baltimore. Pennsylvania anthracite was lower than a year ago in Buffalo and Manchester.

Arkansas anthracite, egg size, which advanced $1.01 per ton in Kansas City, was the only noticeable change in the western anthracite over the year period.

Bituminous.—Prices of low-volatile coal in general showed increases in 14 cities and declines in 9 cities in March 1941 as compared with a year earlier. Moderate advances were reported from Minneapolis,

[1] A mimeographed report of prices by cities is available upon request.

Omaha, St. Paul, and Richmond, and sharp increases of $1.50 to $2 per ton from Norfolk, Va. Advances of not more than 50 cents per ton were quite general for Eastern high-volatile over the year period. In Peoria, egg size was up 73 cents; in Springfield, lump rose 65 cents; in Savannah, stove increased $1.07 per ton; and in Norfolk all sizes advanced $1.50 per ton, representing the greatest increase in any city in which prices were secured. Prices of Western high-volatile coal increased over the year in 15 cities and declined in 4. The greatest increases were as follows: Stoker, 67 cents in Kansas City; lump, 60 cents in St. Louis; lump and egg, 67 cents in Denver; and lump, $1.07 per ton in Los Angeles. The greatest decreases were: Lump, 88 cents, and egg, 69 cents in Springfield; and nut, 83 cents in Butte.

Wholesale Prices

WHOLESALE PRICES IN APRIL 1941 [1]

COMMODITY prices in wholesale markets registered a sharper gain from March to April than for any similar period since the outbreak of the war in Europe in the late summer of 1939. The Bureau of Labor Statistics' index of nearly 900 price series rose 2.1 percent to 83.2 percent of the 1926 average, the highest level since November 1937. The tight shipping situation, heavy demand, and anticipated higher loan values for certain domestic crops were largely responsible for the widespread increase. Marked advances were registered in prices for important imported commodities, particularly coffee, sugar, barley, hemp, sisal, and rubber and for domestic agricultural commodities and their products, including grains, livestock, fats and oils, eggs, cotton, and cotton goods.

Each of the 10 major commodity group indexes advanced during the month. Farm products led with a gain of 3.9 percent. Foods followed closely, advancing 3.6 percent. Textile products rose 3.3 percent; chemicals and allied products, 2.5 percent; hides and leather products, fuel and lighting materials, and miscellaneous commodities, 1.3 percent; housefurnishing goods, 1 percent; building materials, 0.6 percent; and metals and metal products, 0.2 percent.

Broad gains have been recorded in certain group and subgroup indexes during the year period. From April 1940 to April 1941, textile products advanced 11 percent; foods, nearly 9 percent; building materials, 8 percent; farm products, 7 percent; and chemicals and allied products, 6 percent. Outstanding changes in subgroup indexes during the year were increases of 48 percent for fats and oils; 26 percent for livestock and poultry; 23 percent for cotton goods; 20 percent for meats, lumber, and crude rubber; 19 percent for "other textile products" and drugs and pharmaceuticals; 17 percent for "other foods"; and more than 10 percent for hides and skins and woolen and worsted goods. Grains, on the contrary, declined 8 percent; cereal products, 7 percent; and cattle feed, nearly 15 percent.

Average prices for raw materials rose 2.9 percent to a 3½-year peak largely because of sharp advances in prices for agricultural commodities

[1] More detailed information on wholesale prices is given in the Wholesale Price pamphlet and will be furnished upon request.

and for crude petroleum, copra, and tankage. Semimanufactured commodity prices were 2 percent higher and manufactured commodities, 1½ percent. Nonagricultural commodity prices were at the highest point since October 1937, according to the index for "All commodities other than farm products," and industrial commodity prices, as measured by the index for "All commodities other than farm products and foods," were at the highest level since September 1937.

The advance of 3.9 percent in the farm products group brought the index to the highest point since late 1937. Both grain and livestock and poultry prices were about 4½ percent higher in April than in March. Sharp gains occurred in prices for barley, oats, corn, rye, wheat, for calves, cows, hogs, and live poultry, and for cotton, eggs, apples, milk at Chicago, flaxseed, onions, potatoes, and wool. Quotations for sheep were lower as were also prices for hay, hops, milk at New York, citrus fruits, and sweet potatoes. Cattle feed prices rose 3 percent.

Average prices for foods in wholesale markets advanced 3.6 percent in April, largely because of increases of 5.1 percent for fruits and vegetables, 2.3 percent for meats, and 2.1 percent for cereal products, together with marked increases in prices for most imported foods, including cocoa beans, coffee, tea, pepper, and sugar, and for edible fats and oils and canned and cured fish. Beef and veal declined.

Higher prices for hides, skins, and leather caused the hides and leather products group index to advance 1.3 percent. Goatskins rose nearly 11½ percent and cow and steer hides approximately 6 percent.

Cotton goods continued to advance sharply under the impetus of heavy demand and rising prices of raw cotton. The further increase of 7 percent during April brought the net gain this year to 14½ percent. In April, yarns rose about 15 percent; unbleached sheeting, 12 percent; print cloth and percale, over 9 percent; and osnaburg and toweling, more than 7 percent. Higher prices were also reported for woolen and worsted materials and for burlap, hemp, sisal, cordage, and thread. Average prices for clothing advanced about 1 percent because of higher prices for overalls, suits and topcoats, hosiery, underwear, and handkerchiefs.

Strengthening prices for crude petroleum, gasoline, and fuel oil were responsible for the increase in the fuel and lighting materials group index. Prices for coal declined fractionally. Higher prices were reported for lubricating oils and waxes.

Changes in prices of metals and metal products were slight and varied. Small tools and certain building supplies such as butts, wood screws, galvanized pipe, and range boilers advanced, and increases were also reported in prices for southern pig iron, pig lead, quicksilver, lead pipe, solder, and babbitt metal. Ceiling prices established by the Defense Commission on April 3 brought prices

for scrap steel below the prevailing market level. Farm machinery prices averaged lower in April than at any time since August of last year.

Pronounced advances in prices for certain paint materials, particularly shellac, turpentine, linseed oil, tung oil, and carbon black, together with higher prices for tile, sewer pipe, roofing slate, gravel, and millwork, were instrumental in the increase of 0.6 percent in the building materials group index. Average prices for lumber were unchanged at the March level. Quotations were higher for birch, gum, poplar, spruce, redwood, sugar pine, Ponderosa pine boards and yellow pine finish, drop siding, and for flooring. Idaho pine declined during the month and prices were also lower for yellow pine boards, dimension, and timber.

Wholesale prices of chemicals and allied products rose 2.5 percent in April to the highest level since July 1937, largely because of a further increase of over 24 percent for the industrial grades of fats and oils which were 50 percent higher than they were the first of this year. Fatty acids also advanced and price increases were reported for alcohol, cream of tartar, soda phosphate, tin tetrachloride, tartaric acid, nux vomica, and for fertilizer materials such as tankage, cottonseed meal, fish scrap, and phosphate rock.

Advancing prices for furniture, bedding, floor covering, and tableware caused the housefurnishing goods group index to rise 1 percent during April.

Higher transportation costs and scarcity of shipping facilities sent crude rubber prices up 4.4 percent to nearly equal their speculative high point of September 1939, following the outbreak of war. Prices for paper and boxboard were higher in April and mechanical wood pulp declined.

Index numbers for the groups and subgroups of commodities for March and April 1941 and for April 1940 and the percentage changes from a month ago and a year ago are shown in table 1.

TABLE 1.—*Index Numbers of Wholesale Prices by Groups and Subgroups of Commodities, April 1941, With Comparisons for March 1941 and April 1940*

[1926=100]

Group and subgroup	April 1941	March 1941	Change from a month ago	April 1940	Change from a year ago
			Percent		*Percent*
All commodities	**83.2**	**81.5**	**+2.1**	**78.6**	**+5.9**
Farm products	**74.4**	**71.6**	**+3.9**	**69.4**	**+7.2**
Grains	70.9	67.8	+4.6	77.2	−8.2
Livestock and poultry	86.2	82.5	+4.5	68.4	+26.0
Other farm products	67.8	65.6	+3.4	67.4	+.6
Foods	**77.9**	**75.2**	**+3.6**	**71.6**	**+8.8**
Dairy products	81.0	80.3	+.9	77.4	+4.7
Cereal products	76.8	75.2	+2.1	83.2	−7.7
Fruits and vegetables	63.8	60.7	+5.1	65.7	−2.9
Meats	85.6	83.7	+2.3	71.1	+20.4
Other foods	73.9	68.9	+7.3	63.2	+16.9
Hides and leather products	**103.9**	**102.6**	**+1.3**	**101.8**	**+2.1**
Shoes	107.8	107.4	+.4	108.2	−.4
Hides and skins	104.7	99.1	+5.7	94.8	+10.4
Leather	95.6	94.8	+.8	93.2	+2.6
Other leather products	100.5	100.5	0	100.0	+.5
Textile products	**81.0**	**78.4**	**+3.3**	**72.9**	**+11.1**
Clothing	88.7	87.7	+1.1	84.7	+4.7
Cotton goods	86.8	81.1	+7.0	70.2	+23.6
Hosiery and underwear	61.1	60.4	+1.2	61.7	−1.0
Rayon	29.5	29.5	0	29.5	0
Silk	48.3	47.7	+1.3	45.4	+6.4
Woolen and worsted goods	93.3	93.2	+.1	83.8	+11.3
Other textile products	89.3	80.1	+11.5	74.6	+19.7
Fuel and lighting materials	**72.9**	**72.0**	**+1.3**	**71.8**	**+1.5**
Anthracite	80.9	81.0	−.1	77.4	+4.5
Bituminous coal	100.0	100.3	−.3	96.4	+3.7
Coke	113.8	113.8	0	109.6	+3.8
Electricity	[1]	[1]		76.0	
Gas	78.1	77.0	+1.4	82.0	−4.8
Petroleum and products	51.9	49.9	+4.0	50.4	+3.0
Metals and metal products	**97.9**	**97.7**	**+.2**	**94.5**	**+3.6**
Agricultural implements	92.3	92.7	−.4	93.5	−1.3
Farm machinery	93.5	93.9	−.4	94.7	−1.3
Iron and steel	95.9	95.7	+.2	94.3	+1.7
Motor vehicles	100.1	99.8	+.3	94.8	+5.6
Nonferrous metals	84.3	84.3	0	79.2	+6.4
Plumbing and heating	83.0	82.8	+.2	80.9	+2.6
Building materials	**100.1**	**99.5**	**+.6**	**92.5**	**+8.2**
Brick and tile	91.7	91.5	+.2	90.2	+1.7
Cement	91.0	90.8	+.2	90.3	+.8
Lumber	116.7	116.7	0	96.7	+20.7
Paint and paint materials	88.7	87.4	+1.5	86.7	+2.3
Plumbing and heating	83.0	82.8	+.2	80.9	+2.6
Structural steel	107.3	107.3	0	107.3	0
Other building materials	95.9	95.2	+.7	92.3	+3.9
Chemicals and allied products	**81.8**	**79.8**	**+2.5**	**76.8**	**+6.5**
Chemicals	86.4	85.9	+.6	85.0	+1.6
Drugs and pharmaceuticals	97.5	97.2	+.3	81.8	+19.2
Fertilizer materials	71.0	70.4	+.9	70.7	+.4
Mixed fertilizers	73.2	73.7	−.7	73.8	−.8
Oils and fats	69.3	55.7	+24.4	46.8	+48.1
Housefurnishing goods	**90.4**	**89.5**	**+1.0**	**88.4**	**+2.3**
Furnishings	97.1	95.8	+1.4	94.5	+2.8
Furniture	83.4	82.9	+.6	81.9	+1.8
Miscellaneous	**78.6**	**77.6**	**+1.3**	**77.7**	**+1.2**
Automobile tires and tubes	58.8	58.4	+.7	58.0	+1.4
Cattle feed	85.2	82.7	+3.0	100.1	−14.9
Paper and pulp	94.5	93.5	+1.1	89.5	+5.6
Rubber, crude	47.6	45.6	+4.4	39.4	+20.8
Other miscellaneous	84.3	83.4	+1.1	85.1	−.9
Raw materials	**77.5**	**75.3**	**+2.9**	**73.0**	**+6.2**
Semimanufactured articles	**85.1**	**83.4**	**+2.0**	**78.2**	**+8.8**
Manufactured products	**85.5**	**84.2**	**+1.5**	**81.2**	**+5.3**
All commodities other than farm products	**85.0**	**83.6**	**+1.7**	**80.5**	**+5.6**
All commodities other than farm products and foods	**85.9**	**84.9**	**+1.2**	**82.5**	**+4.1**

[1] Data not yet available.

Index Numbers by Commodity Groups, 1926 to April 1941

Index numbers of wholesale prices by commodity groups for selected years from 1926 to 1940, inclusive, and by months from April 1940 to April 1941, inclusive, are shown in table 2.

TABLE 2.—*Index Numbers of Wholesale Prices by Groups of Commodities*

[1926=100]

Year and month	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting	Metals and metal products	Building materials	Chemicals and allied products	House-furnishing goods	Miscellaneous	All commodities
By years:											
1926	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1929	104.9	99.9	109.1	90.4	83.0	100.5	95.4	94.0	94.3	82.6	95.3
1932	48.2	61.0	72.9	54.9	70.3	80.2	71.4	73.9	75.1	64.4	64.8
1933	51.4	60.5	80.9	64.8	66.3	79.8	77.0	72.1	75.8	62.5	65.9
1936	80.9	82.1	95.4	71.5	76.2	87.0	86.7	78.7	81.7	70.5	80.8
1937	86.4	85.5	104.6	76.3	77.6	95.7	95.2	82.6	89.7	77.8	86.3
1938	68.5	73.6	92.8	66.7	76.5	95.7	90.3	77.0	86.8	73.3	78.6
1939	65.3	70.4	95.6	69.7	73.1	94.4	90.5	76.0	86.3	74.8	77.1
1940	67.7	71.3	100.8	73.8	71.7	95.8	94.8	77.0	88.5	77.3	78.6
By months:											
1940:											
April	69.4	71.6	101.8	72.9	71.8	94.5	92.5	76.8	88.4	77.7	78.6
May	67.9	71.4.	101.3	72.9	71.7	94.5	92.5	76.7	88.5	77.7	78.4
June	66.2	70.3	99.2	72.6	71.4	94.7	92.4	76.1	88.5	77.3	77.5
July	66.5	70.3	99.0	72.4	71.1	95.1	[1] 92.5	77.0	88.5	77.7	77.7
August	65.6	70.1	96.9	72.3	71.1	94.9	[1] 93.3	76.7	88.5	76.7	77.4
September	66.2	71.5	98.3	72.5	71.0	95.4	[1] 95.6	76.8	88.5	76.5	78.0
October	66.4	71.1	100.4	73.6	71.6	97.3	97.8	76.9	88.6	76.9	78.7
November	68.2	72.5	102.3	74.5	71.9	97.6	98.9	77.5	88.6	77.5	79.6
December	69.7	73.5	102.3	74.8	71.7	97.6	99.3	77.7	88.9	77.3	80.0
1941:											
January	71.6	73.7	102.4	75.2	72.1	97.7	99.6	78.6	89.0	77.1	80.8
February	70.3	73.5	101.6	76.4	72.1	97.6	99.3	78.5	89.1	76.9	80.6
March	71.6	75.2	102.6	78.4	72.0	97.7	99.5	79.8	89.5	77.6	81.5
April	74.4	77.9	103.9	81.0	72.9	97.9	100.1	81.8	90.4	78.6	83.2

[1] Revised

The price trend for specified years and months since 1926 is shown in table 3 for the following groups of commodities: Raw materials, semimanufactured articles, manufactured products, commodities other than farm products, and commodities other than farm products and foods. The list of commodities included under the classifications "Raw materials," "Semimanufactured articles," and "Manufactured products" was given in Serial No. R. 1251—Wholesale Prices, December and Year 1940.

TABLE 3.—*Index Numbers of Wholesale Prices by Special Groups of Commodities*

[1926=100]

Year and month	Raw materials	Semimanufactured articles	Manufactured products	All commodities other than farm products	All commodities other than farm products and foods
By years:					
1926	100.0	100.0	100.0	100.0	100.0
1929	97.5	93.9	94.5	93.3	91.6
1932	55.1	59.3	70.3	68.3	70.2
1933	56.5	65.4	70.5	69.0	71.2
1936	79.9	75.9	82.0	80.7	79.6
1937	84.8	85.3	87.2	86.2	85.3
1938	72.0	75.4	82.2	80.6	81.7
1939	70.2	77.0	80.4	79.5	81.3
1940	71.9	79.1	81.6	80.8	83.0
By months:					
1940:					
April	73.0	78.2	81.2	80.5	82.5
May	72.0	78.3	81.3	80.5	82.5
By months—Con.					
1940—Con.					
June	70.7	77.9	80.5	79.8	82.2
July	70.7	77.8	80.9	80.0	82.3
August	69.8	77.0	81.0	79.9	82.0
September	70.5	77.6	81.5	80.4	82.3
October	71.4	79.4	82.1	81.3	83.5
November	72.6	80.7	82.6	81.9	84.1
December	73.6	80.7	82.8	82.1	84.1
1941:					
January	74.6	81.3	83.5	82.7	84.3
February	74.0	81.6	83.5	82.7	84.4
March	75.3	83.4	84.2	83.6	84.9
April	77.5	85.1	85.5	85.6	85.9

Weekly Fluctuations

Weekly fluctuations in the major commodity group classifications during March and April are shown by the index numbers in table 4.

TABLE 4.—*Weekly Index Numbers of Wholesale Prices by Commodity Groups, March and April 1941*

(1926=100)

Commodity group	Apr. 26	Apr. 19	Apr. 12	Apr. 5	Mar. 29	Mar. 22	Mar. 15	Mar. 8	Mar. 1
All commodities	83.0	83.0	82.9	82.2	82.0	81.6	80.9	80.6	80.5
Farm products	74.3	75.0	74.9	72.7	73.2	72.3	70.9	70.5	70.4
Foods	78.1	77.8	77.5	76.7	76.4	75.6	74.3	73.4	73.1
Hides and leather products	104.7	104.3	103.9	103.9	103.5	103.3	102.8	102.5	102.1
Textile products	80.7	80.5	80.4	80.1	79.2	78.2	77.2	76.6	76.3
Fuel and lighting materials	73.5	73.3	73.4	73.2	72.6	72.5	72.6	72.6	72.6
Metals and metal products	97.9	97.8	97.8	97.8	97.9	97.8	97.8	97.9	98.0
Building materials	100.1	100.0	99.9	99.8	99.7	99.5	99.4	99.5	99.5
Chemicals and allied products	82.6	82.2	81.7	80.9	80.6	80.0	79.2	78.7	78.6
Housefurnishing goods	91.6	91.6	91.5	91.5	91.2	90.9	90.8	90.8	90.7
Miscellaneous	78.4	78.4	78.1	78.0	77.8	77.5	77.0	76.8	76.7
Raw materials	77.1	77.6	77.4	76.2	76.3	75.6	74.5	74.1	73.9
Semimanufactured articles	85.2	85.0	84.9	84.6	84.4	83.6	82.7	82.2	82.0
Manufactured products	85.8	85.7	85.6	85.1	84.8	84.5	84.0	83.8	83.7
All commodities other than farm products	85.0	84.8	84.7	84.4	84.0	83.7	83.1	82.8	82 7
All commodities other than farm products and foods	86.1	86.0	85.9	85.8	85.4	85.1	84.9	84.8	84.7

Recent Publications of Labor Interest

June 1941

Child Labor and Child Welfare

Report of Chief of Children's Bureau [U. S. Department of Labor], fiscal year ended June 30, 1940. Washington, 1941. 78 pp. (Reprinted from Annual report of Secretary of Labor.)

Child labor in agriculture. Statement of Beatrice McConnell, Director, Industrial Division, Children's Bureau, U. S. Department of Labor, submitted to subcommittee of Committee on Education and Labor, U. S. Senate, pursuant to S. Res. 266. Washington, U. S. Children's Bureau, 1940. 66 pp., charts, maps; mimeographed.

Physically handicapped children in New York City. New York, Board of Education, Committee for Study of Care and Education of Physically Handicapped Children, 1941. 91 pp.

The report covers the medical, educational, and associated services for physically handicapped children in New York City, and makes various recommendations for improvement of these services.

Child workers in Pennsylvania: Analysis of industrial accidents to minors, 1934–1939. By Anna Reid. Harrisburg, Department of Labor and Industry, Bureau of Women and Children, 1940. 36 pp., charts; processed.

The child-health conference—suggestions for organization and procedure. Washington, U. S. Children's Bureau, 1941. 42 pp. (Bureau publication No. 261.)

Social services for children. From preliminary statements submitted to White House Conference on Children in a Democracy, January 18–20, 1940, Washington, D. C. Washington, U. S. Children's Bureau, 1940. 33 pp.

According to this publication, the first objective of child-welfare service is to provide for every child in need the requisite aid and guidance to assure him security, protection, and opportunity for the development of his personality.

Conciliation and Arbitration

Three years of arbitrating labor disputes. (In Arbitration Journal, New York, January 1941, pp. 65–74.)

Review of the first 3 years of experimentation with labor arbitrations by the American Arbitration Association. During this period, employers and unions submitted to the Association's voluntary industrial arbitration tribunal a total of 400 controversies, involving a variety of industries and points of dispute.

Mediation, arbitration, and investigation of industrial disputes in New York State, 1937–40. By Walter P. Arenwald. (In Journal of Political Economy, Chicago, February 1941, pp. 59–89.)

Arbitration in men's clothing industry in New York City. By Rita Morgan. New York, Columbia University, Teachers College, 1940. 153 pp., bibliography, charts. (Contributions to education, No. 823.)

A case study of industrial arbitration and conference method with particular reference to its educational implications.

EDITOR'S NOTE.—The Bureau of Labor Statistics does not distribute the publications to which reference is made in this list, except those issued by the Bureau itself. For all others, please write to the respective publishing agencies mentioned.

The Railway Labor Act and the National Mediation Board. Washington, U. S. National Mediation Board, 1940. 76 pp.

Published to meet the demand for general information on the Railway Labor Act and the National Mediation Board, and to review the operations of the National Mediation Board from July 21, 1934, the date it began functioning, to June 30, 1939, the end of its fifth year of existence.

Labor under German democracy—arbitration, 1918–1933. By Frieda Wunderlich. New York, New School for Social Research, 1940. 101 pp.

First of a series of monographs, being published by the New School for Social Research, on social policy in the German Republic, 1918–1933. This volume describes the development and functioning of the arbitration system in effect during that period, which, the author states, "outgrew its traditional task of conciliation in labor disputes and developed into a powerful economic force." One chapter discusses the effect of arbitration on trade unionism.

Consumer Movement

The consumer movement—what it is and what it means. By Helen Sorenson. New York, Harper & Bros., 1941. xiii, 245 pp.

Describes the development of the consumer movement and in various chapters shows how scientists, educators, consumer groups, and business enterprises fit into the picture. One chapter is devoted to a description of cooperatives and their work for labeling and improvement of quality of goods.

Consumer knowledge builds defense—a selected bibliography of available pamphlet material. Washington, U. S. Office for Emergency Management, Consumer Division, 1941. 62 pp.; mimeographed. (Bull. No. 11.)

Report of Consumers' Counsel, U. S. Department of Agriculture, 1940. Washington, 1940. 16 pp.

The consumer movement and business. Address by Grace S. M. Zorbaugh at Consumer Conference of Greater Cincinnati, October 20, 1940. Columbus, Ohio, 1941. 15 pp. (Available from Ohio State University Bookstore.)

Defense and the consumer. New York, Public Affairs Committee, Inc., 1941. 31 pp., charts, illus. (Public affairs pamphlet No. 54.)

This pamphlet was prepared by the Institute for Consumer Education, Stephens College, Columbia, Mo., on the basis of materials provided by the Consumer Division of the National Defense Advisory Commission. Contains a general discussion of how the defense program affects the consumer and gives a list of ways in which the family buyer can be a "good consumer" during the defense emergency.

Retailing and consumer movements. By Kenneth Dameron. (In Journal of Marketing, New York, April 1941, pp. 385-394.)

One of the papers presented at the meeting of the American Marketing Association in Chicago in December 1940, most of which are reproduced in this issue of the Journal of Marketing.

Read your labels. By Helen Dallas and Maxine Enlow. New York, Public Affairs Committee, Inc., 1941. 31 pp. (Public affairs pamphlet No. 51.)

Urges consumers to work together to obtain good laws (with adequate enforcement) for consumer protection, and lists four ways by which consumers can protect themselves against impure foods, drugs, and cosmetics. A brief reading list is appended.

Cooperative Movement

Consumers' cooperation in 1940. Washington, U. S. Bureau of Labor Statistics, 1941. 11 pp. (Serial No. R. 1275, reprint from March 1941 Monthly Labor Review.)

Bibliographical review of literature on legal phases of cooperation. New York, Cooperative Project, 1941. 242 pp.; mimeographed. (Studies of the Cooperative Project, Series A, Part III; prepared in cooperation with Work Projects Administration for City of New York and U. S. Bureau of Labor Statistics.)

This is the third of a series dealing with law and cooperatives. The two preceding volumes dealt with the cooperative laws themselves; this volume covers

the literature concerning legal matters as they relate to cooperatives. The table of contents lists the references with respect to the types of cooperatives; two separate indexes list them by author or issuing organization and by geographical location (country, State, county, city, etc.). An appendix shows, for the various laws mentioned, any later developments that may have taken place, such as repeal, supercession by a later law, or amendment. This is an inclusive, not a "selected," bibliography; neither medical-care nor housing cooperatives are included, as they will be carried in later reports.

Report of Administrator of Rural Electrification Administration, 1940. Washington, [1941]. 54 pp.

An account of the activities of the REA during 1940, including statistics of loans, repayments, etc., and a discussion of new developments in the law of rural electrification (taxation of REA cooperatives, State regulation of cooperatives, problems of telephone interference, and opposition by power companies). Certain data on electricity cooperatives were published in an article in the April 1941 issue of the Monthly Labor Review.

Credit unions—the people's banks. By Maxwell S. Stewart. New York, Public Affairs Committee, Inc., 1940. 31 pp., charts. (Public affairs pamphlet No. 50.)

Describes, in popular style, what a credit union is, how to organize one, and the need for such a source of credit. Includes a short list of references to credit-union literature.

Agricultural credit in Denmark. By Walter Bauer. Washington, U. S. Farm Credit Administration, 1940. 71 pp., bibliography, map. (Bull. No. CR–2.)

Includes sections dealing with cooperative village banks and the Bank for Cooperatives (Andelsbanken).

Cost and Standards of Living

Family expenditures for automobile and other transportation, five regions. By Day Monroe and others. Washington, U. S. Bureau of Home Economics, 1941. 268 pp., charts. (Consumer purchases study, Urban, village, and farm series; Department of Agriculture miscellaneous publication No. 415.)

Family food consumption and dietary levels, five regions. By Hazel K. Stiebeling and others. Washington, U. S. Bureau of Home Economics, 1941. 393 pp., charts. (Consumer purchases study, Farm series; Department of Agriculture miscellaneous publication No. 405.)

Family expenditures for medical care, five regions. By Helen Hollingsworth and others. Washington, U. S. Bureau of Home Economics, 1941. 241 pp., charts. (Consumer purchases study, Urban, village, and farm series; Department of Agriculture miscellaneous publication No. 402.)

Changes in rents since outbreak of war. By Arnold E. Chase. Washington, U. S. Bureau of Labor Statistics, 1941. 7 pp. (Serial No. R. 1274, reprint from March 1941 Monthly Labor Review.)

Wartime changes in the cost of living. By Charles E. Noyes. Washington, Editorial Research Reports, 1013 Thirteenth Street NW., 1941. 16 pp. (Vol. 1, 1941, No. 16.)

Shows the movements in cost of living in the World War and in the present war, and outlines measures to prevent general price inflation.

Are we well fed? A report on the diets of families in the United States. By Hazel K. Stiebeling. Washington, U. S. Bureau of Home Economics, 1941. 28 pp., charts. (Department of Agriculture miscellaneous publication No. 430.)

Economic and Social Problems

Advisory bodies: A study of their uses in relation to central government, 1919–1939. Edited by R. V. Vernon and N. Mansergh. London, George Allen & Unwin, Ltd., 1940. 520 pp.

This volume is prefaced by the statement that the proper use of advisory bodies is the right answer of representative democracy to the challenge of the corporative state. It contains chapters on the operations of advisory committees in different fields of governmental work in Great Britain, including industrial relations and unemployment assistance.

Southern industry and regional development. By Harriet L. Herring. Chapel Hill, University of North Carolina Press, 1940. xiii, 103 pp.

Described by Professor Howard W. Odum in the foreword as a highly useful manual which should be in the hands of all who are interested in the industrial problems of the South and in the achievement of a balanced regional economy.

Sharecroppers all. By Arthur F. Raper and Ira De A. Reid. Chapel Hill, University of North Carolina Press, 1941. 281 pp., illus.

Defining a sharecropper as a person who "shares in the risk without sharing in the control," the authors extend the meaning of the term sharecropper to include many nonfarm workers subject to "low wages, insecurity, and lack of opportunity for self-direction and responsible participation in community affairs."

The flow of business funds and consumer purchasing power. By Ruth P. Mack. New York, Columbia University Press, 1941. 400 pp., charts.

The author analyzes in technical terms, based on data of 54 large corporations, the relation between the flow of business funds and consumer purchasing power. The conclusions reached indicate the need of economic integration or "the application of deliberate techniques of organization to the economic system as a whole." The conclusions imply not a detailed control and check on all operations but rather a general management of the broad relations in the economy, particularly within the area suggested by the title of the book.

Education and Training

Laws relating to vocational education and agricultural extension work. Compiled by Elmer A. Lewis. Washington, Government Printing Office, 1941. 96 pp.

Principles and techniques of vocational guidance. By George E. Myers. New York, McGraw-Hill Book Co., Inc., 1941. 377 pp.

Principles and methods of industrial training. New York, American Management Association, 1941. 51 pp., charts. (Personnel series No. 47.)

Training workers for national defense. By William F. Patterson, Chief of Apprenticeship, Division of Labor Standards, U. S. Department of Labor. (In Labor Information Bulletin, U. S. Bureau of Labor Statistics, Washington, April 1941, pp. 1–3, illus.)

Revival of apprenticeship. By Bryant Putney. Washington, Editorial Research Reports, 1013 Thirteenth Street NW., 1940. 16 pp. (Vol. 2, 1940, No. 23.)

The report outlines the measures being taken to reestablish the apprenticeship system, particularly under the Federal Committee on Apprenticeship established in 1937. During the last three years and particularly within the last few months, substantial progress has been made toward the development of a Nation-wide apprenticeship system.

Counseling the handicapped: A manual on aptitudes, their discovery and interpretation. By Holland Hudson and Rosetta van Gelder. New York, National Tuberculosis Association, 1940. 55 pp., charts.

Employment and Unemployment

Employment and earnings in 1940. By Witt Bowden. Washington, U. S. Bureau of Labor Statistics, 1941. 18 pp. (Serial No. R. 1269, reprint from March 1941 Monthly Labor Review.)

Employment trends and defense labor requirements. By A. F. Hinrichs. Washington, U. S. Bureau of Labor Statistics, 1941. 12 pp., charts. (Serial No. R. 1279, reprint from May 1941 Monthly Labor Review.)

57th Annual report of United States Civil Service Commission, fiscal year ended June 30, 1940. Washington, 1941. xiv, 146 pp., charts.

Civil employment in the executive branch of the United States Government had reached 1,002,820 in June 1940, an increase of 70,515 over the number employed in December 1939 and of 82,510 over the June 1939 figure. Of the total number in June 1940, almost 30 percent—295,149—were in the Post Office Department, the War Department having the next highest number, 136,841, or 13.7 percent, followed by the Navy Department with 117,981, or 11.8 percent.

Offices located outside the District of Columbia had the largest number of workers, 869,175 against 133,645 in the District. Male workers numbered 816,610 as compared with 186,210 female workers.

Seasonal employment in Arizona. By C. B. Sullenger. Phoenix, Arizona Unemployment Compensation Commission, 1941. 23 pp. and charts; mimeographed.

The bulletin shows monthly employment changes in eight seasonal industries in Arizona and describes the administrative operating procedure in regard to unemployment-insurance claims.

Labor laws and deaf employment. By Ben M. Schowe. (In American Annals of the Deaf, Washington, D. C., March 1941, pp. 117–130.)

Discussion of effect of the Fair Labor Standards Act, the Public Contracts Act, National Labor Relations Act, and workmen's compensation laws, on attitude of employers with respect to employment of deaf workers.

The unemployed man and his family: The effect of unemployment upon the status of the man in fifty-nine families. By Mirra Komarovsky. New York, Dryden Press, Inc. (for Institute of Social Research), 1940. 163 pp.

Included in the subjects covered in the study are the unemployed father and the young child, the unemployed father and the adolescent child, the break-down of the husband's status, personality changes of the unemployed husband, and other effects of unemployment upon family life.

Annual review of employment situation in Canada during 1940. Ottawa, Dominion Bureau of Statistics, 1941. 75 pp., charts; mimeographed.

Data are presented by economic areas, leading cities, industries, etc.

The effect of the war on the organization and structure of the Canadian employment market. A preliminary study by Elizabeth Harvey Mayer. (In International Labor Review, Montreal, Canada, January 1941, pp. 51–89.)

Employment Offices

Administrative problems of employment services in eight States. By Oscar Weigert. Chicago, Public Administration Service, 1940. 50 pp. (Publication No. 72.)

While the study deals primarily with the public employment service, it is also relevant to administration of the whole social-security program. It covers the National, State, and local employment services; the internal organization of local offices; the integration of compensation activities with local employment offices; and personnel problems.

The [United States] Employment Service and national defense. By Ewan Clague. (In Labor Information Bulletin, U. S. Bureau of Labor Statistics, Washington, February 1941, pp. 8–10.)

The development and organization of public labor exchanges in Sweden. By Harrison Clark. (In Social Service Review, Chicago, September 1940, pp. 453–468.)

The work of these labor exchanges in Sweden includes such functions as the recruiting of labor by busses spanning a wide area, transportation of workers long distances from one seasonal job to another, and the setting up of trade schools and camps for young workers in depressed areas.

Health and Industrial Hygiene

The prevalence of disabling illness among male and female workers and housewives. By David E. Hailman. Washington, U. S. Public Health Service, 1941. 40 pp., charts. (Public health bull. No. 260.)

This report is based upon data collected by the National Health Survey in 83 cities in the United States in 1935–36. The study showed that illness, as measured by the proportion of persons disabled on the day of the visit, was for each age group greater among female workers than it was among male workers, and that except in the case of accidents, the rate for every diagnosis or group of diagnoses was higher for housewives than for gainfully-employed females.

Protecting plant manpower: Practical points on industrial sanitation and hygiene. Washington, U. S. Department of Labor, Division of Labor Standards, 1941. 70 pp. (Special bull. No. 3.)

Lifting heavy weights in defense industries: Methods for conserving health of women workers. By Margaret T. Mettert. Washington, U. S. Women's Bureau, 1941. 11 pp., illus. (Special bull. No. 2.)

The bulletin lists types of jobs requiring heavy lifting in which women were employed in this country and Great Britain during the last war, and discusses the effects on women of lifting too heavy loads and methods of work which will reduce the dangers involved in weight lifting.

Studio sull' asbestosi nelle manifatture di amianto. By Enrico C. Vigliani. Ciriè, Giovanni Capella, 1940. 74 pp., bibliography, diagrams, illus. (Edizione dell'Ente Nazionale di Propaganda per la Prevenzione Infortuni.)

Study of the causes and results of asbestosis and the means which have been taken to safeguard workers in the asbestos industry.

Report of Director-General of Public Health, New South Wales, for 1938. Sydney, 1940. 151 pp., charts.

The report of the medical officer for industrial hygiene, contained in the general report listed, gives the results of various investigations carried out during the year, including studies of dust diseases of the lungs in different industries, carbon dioxide poisoning, and ventilation of theaters and public halls.

Homes for Aged

Homes for aged in the United States. Washington, U. S. Bureau of Labor Statistics, 1941. 126 pp. (Bull. No. 677.)

Incorporated homes for the aged, and public welfare homes—a directory. Trenton, New Jersey Department of Institutions and Agencies, 1940. 22 pp. (Pub. 39.)

Lists homes in New Jersey and gives admission requirements in each case.

Housing

Defense housing digest—a summary of laws, regulations, and results. Chicago, National Association of Housing Officials, 1940. Various paging.

Issued in a loose-leaf binder in order that additions to the information may be made as available.

Housing bibliography. By Loeta Johns and Earline Scott. Columbia, Mo., Stephens College, Institute for Consumer Education, December 1940. 45 pp.; mimeographed.

Housing of 299 Vermont village families. By Virginia Britton. Burlington, University of Vermont and State Agricultural College, Agricultural Experiment Station, 1940. 52 pp., charts. (Bull. 469.)

This study was made with special reference to the relation of type of housing, equipment, and expenses to family type, income, occupation, and tenure. It is based on the cooperative Government study of consumer purchases in which the Bureau of Labor Statistics participated.

The wartime housing problem [in Canada]. Montreal, Canadian Federation of Mayors and Municipalities, 1941. 24 pp.; mimeographed.

Comments on the housing problem and suggestions for meeting it.

Public relations of local housing authorities. Chicago, Ill., National Association of Housing Officials, 1941. Various paging; mimeographed.

A committee report on a vital function of local housing agencies.

Industrial Accidents

Coke-oven accidents in the United States during calendar year 1939. By William W. Adams and Virginia E. Wrenn. Washington, U. S. Bureau of Mines, 1940. 17 pp., chart. (Technical paper 623.)

Accidents at coke ovens in 1939 caused the death of 11 workers, an increase of 5 over 1938. There were 395 nonfatal injuries that disabled the injured employee for more than the remainder of the day on which the accident occurred, as compared with 282 in 1938. The accident-frequency rate, covering fatalities and injuries, was 9.28 per million man-hours of exposure; the rate for 1938 was 7.86.

Quarry accidents in the United States during calendar year 1938. By William W. Adams and Virginia E. Wrenn. Washington, U. S. Bureau of Mines, 1940. 75 pp., chart. (Bull. 432.)

The accident-frequency rate per million man-hours of work in quarrying and related industries declined from 40.59 for 1937 to 38.19 for 1938. Accidents in 1938 resulted in the death of 82 employees, and in nonfatal injury, involving disability for more than the remainder of the day on which it occurred, to 5,027, as compared with 77 deaths and 6,348 nonfatal injuries in 1937.

An analysis of industrial accidents reported to the Bureau of Workmen's Compensation for Territory of Hawaii, as of July 1, 1940, to December 31, 1940, inclusive. Honolulu, Department of Labor and Industrial Relations, Bureau of Research and Statistics, 1941. 20 pp.; mimeographed. (Bull. No. 5.)

A report for the first half of 1940 was published by the Hawaiian bureau in a separate pamphlet.

Dust-explosion hazards in plants producing or handling aluminum, magnesium, or zinc powder. By Hylton R. Brown. Washington, U. S. Bureau of Mines, 1941. 11 pp., bibliography; mimeographed. (Information circular 7148.)

Some preliminary data on methods for controlling the dust hazards in mechanical mining. By C. W. Owings. Washington, U. S. Bureau of Mines, 1941. 12 pp.; mimeographed. (Information circular 7151.)

Industrial Disputes

Strikes in 1940. Washington, U. S. Bureau of Labor Statistics, 1941. 36 pp., charts. (Serial No. R. 1282.)

The minority union's right to strike. By Seymour Cohen. (In Indiana Law Journal, Bloomington, Ind., April 1941, pp. 377–395.)

Strike restrictions in union agreements. Washington, U. S. Bureau of Labor Statistics, 1941. 19 pp. (Serial No. R. 1271, reprint from March 1941 Monthly Labor Review.)

International Labor Conditions

Interamerican statistical yearbook. Prepared under auspices of Argentine Commission of High International Studies, Buenos Aires. New York, Macmillan Co., 1940. 612 pp.

The section of this yearbook devoted to social questions contains statistics of hours of work, hourly wages, index numbers of cost of living, average retail prices, distribution of household expenditures, cooperatives, strikes and lock-outs, and national organizations of workers, at varying periods down to and including 1939, in countries of the Americas, with certain comparable statistics for a number of countries in other parts of the world. Printed in four languages—English, French, Portuguese, and Spanish.

International labor, diplomacy, and peace, 1914–1919. By Austin Van der Slice. Philadelphia, University of Pennsylvania Press, 1941. 408 pp., bibliography.

A history of the war aims of labor during the last war. The labor movement and action taken by different groups in connection with the war in France, Great Britain, and the United States, are described in detail. Other subjects include labor's peace diplomacy, popular front organizations aiding labor's peace program, the labor movement and President Wilson, the governments and labor, the Berne Conference and its aftermath, and labor's lobbying at Paris.

The International Labor Organization in the world crisis. By John G. Winant. Washington, D. C., American Peace Society, [1941]. 4 pp. (Reprinted from World Affairs, December 1940.)

A report to governments, employers, and workers of member states of International Labor Organization. By John G. Winant. Montreal, Canada, International Labor Office, 1941. 16 pp.

Brief statement of some of the more important aspects of emergency planning in the International Labor Organization.

Latin America and the international labor standards. By D. H. Blelloch. (In International Labor Review, Montreal, April 1941, pp. 377–400.)

Concise account of the relations of the international labor Office with the Latin American Republics, with an appendix listing the international labor conventions ratified by the respective Latin American Republics.

Second Labor Conference of the American States which are members of the International Labor Organization, Havana, Cuba, November 21–December 2, 1939. Montreal, Canada, International Labor Office, 1941. 284 pp.

A brief report on this conference was published in the January 1940 Monthly Labor Review (pp. 59–61).

Labor Legislation

Federal labor legislation, 1940. Washington, U. S. Bureau of Labor Statistics, 1941. 10 pp. (Serial No. R. 1276, reprint from March 1941 Monthly Labor Review.)

Labor legislation in thirteen southern States. By Addison T. Cutter. (In Southern Economic Journal, Chapel Hill, N. C., January 1941, pp. 297–316.)

Cases and materials on labor law. By N. P. Feinsinger. Madison, Wis., College Typing Co., 1940. Various paging; mimeographed.

The work covers primarily the field of relations of employers and employees acting collectively. Many ruling labor cases are cited, as well as legislation and regulations promulgated by Federal and State administrative agencies. The material is arranged in two parts, the first dealing with legislative and judicial control of labor relations, and the second, with administrative control.

Should Congress pass new laws to control labor on national defense work? (In Congressional Digest, the Pro and Con Monthly, Washington, D. C., April 1941, pp. 97–128.)

Legal restrictions on employment of aliens in the American republics. Washington, U. S. Bureau of Labor Statistics, 1941. 32 pp. (Serial No. R. 1241, reprint from December 1940 Monthly Labor Review; Latin American series No. 7.)

State antitrust laws. Washington, U. S. Works Progress Administration, Marketing Laws Survey, 1940. lxxx, 880 pp.

Volume 1 in the Marketing Laws Survey series of WPA publications.

Labor Organizations and Activities

Do you know labor? Facts about the labor movement. By James Myers. Washington, National Home Library Foundation, 1940. 133 pp., bibliography.

The International Brotherhood of Pulp, Sulphite, and Paper Mill Workers. By John P. Burke, President-Secretary. (In Labor Information Bulletin, U. S. Bureau of Labor Statistics, Washington, April 1941, pp. 4–7.)

Sindicatos industriales y profesionales existentes en el país [Chile] al 31 de Diciembre 1940. (In Revista del Trabajo, Dirección General del Trabajo, Santiago, February-March 1941, pp. 46–91.)

List, by Province, of all the craft and industrial unions in Chile as of December 31, 1940, with address, number of members, and legal personality of each, at different dates. Preceding this list the Revista del Trabajo gives a summary table showing the total number of such unions, and the total number of members of each class, in the various Provinces.

Labor's aims in war and peace. By C. R. Attlee and others. London, Lincolns-Prager (Publishers), Ltd., [1940]. 154 pp.

Monographs by leading members of the British Labor Party and manifestos on war aims by labor bodies.

Trade unions fight—for what? By Herbert Tracey. London, George Routledge & Sons Ltd., 1940. 222 pp.

Traces developments in Great Britain prior to and since the outbreak of war, showing the machinery established for industrial and labor control, and describes labor's part in the Government's councils.

Medical Care

Medical care: Economic and social aspects of health service. A quarterly journal published for Committee on Research in Medical Economics, Inc., by Williams and Wilkins Co., Baltimore, Md. Vol. 1, No. 1, winter issue, 1941. 105 pp.

The journal was established to disseminate information concerning the economic and social aspects of medicine; to promote a scientific approach to the subject; and to stimulate practical action by the professions and the public in their common interest.

Medicine and human welfare. By Henry E. Sigerist. New Haven, Yale University Press, 1941. 148 pp., illus.

A series of lectures on the history of medicine as related to human welfare.

Michigan Medical Service: A voluntary prepayment plan for medical and surgical services operated by Michigan Medical Service in conjunction with Michigan Hospital Service. Chicago, American Hospital Association, Commission on Hospital Service, 1940. 29 pp.

This service is a State-wide nonprofit plan for the voluntary prepayment of medical bills by groups of employed persons and their families which was organized in March 1940. By October 1, 247,000 subscribers had enrolled in the hospital-service plan, and 69,300 of these subscribers were also participants in the medical-service plan.

Non-profit hospitalization plans. By Jack Chamberlain. (In The Spectator, Philadelphia, Pa., December 12, 1940, pp. 10–14, 20.)

The writer analyzes the provisions common to group hospitalization plans and compares their benefits and costs with the services offered by accident and health companies.

A study of medical problems associated with transients. By Charles F. Blankenship and Fred Safier. Washington, U. S. Public Health Service, 1940. 132 pp., bibliography, charts, illus. (Public health bull. No. 258.)

The report is concerned primarily with the transients' need for medical assistance and the availability of such assistance. In addition to a study of the practices of medical and social agencies in giving assistance to transients, case studies of 1,893 transient families and 9,040 unattached transients in 15 States were made.

Criteria for determining eligibility for medical care. Four papers given at meeting of American Association of Medical Social Workers, Grand Rapids, Mich., May 31, 1940. Chicago, American Association of Medical Social Workers, 1940. 39 pp.

The papers deal with the eligibility of patients for medical care in a voluntary out-patient department of a hospital, and cover respectively the viewpoints of the hospital administration, the public welfare agency, the community, and the medical social services.

Minimum Wage

Progress of State minimum-wage legislation, 1940. By Louise Stitt and Florence P. Smith. Washington, U. S. Bureau of Labor Statistics, 1941. 9 pp. (Serial No. R. 1278, reprint from March 1941 Monthly Labor Review.)

State minimum salary standards for teachers, 1940. Washington, National Education Association of the United States, 1940. 95 pp., bibliography; mimeographed.

Some kind of minimum standard for teachers' salaries is reported for 24 States; in 6 others State-aid funds are apportioned in ways that tend to establish salary standards, although definite minima are not fixed.

Salário mínimo [Brazil]. Rio de Janeiro, Ministério do Trabalho, Indústria, e Comércio, Serviço de Estatística da Previdência e Trabalho, 1940. 565 pp.

Brazilian legislation, through August 31, 1940, on the subject of the minimum wage, together with statistics of actual wages and discussion of the theory of the minimum wage.

Nutrition and Food

The American and his food. By Richard Osborn Cummings. Chicago, University of Chicago Press, 1940. 267 pp., charts, illus.

Traces the development of dietary habits in this country since 1789, showing the effect of custom and availability of various foods on food habits, effects of transportation and refrigeration in producing a more varied diet, results of scientific discoveries as to protective values of foods and education in these values, and effect of the Federal surplus marketing programs in promoting a better-balanced diet among persons on relief.

Essentials of nutrition. By Henry C. Sherman and Caroline Sherman Lanford. New York, Macmillan Co., 1940. 418 pp., charts, illus.

This work, which is designed for use as a textbook, discusses the various food elements and their nutritional value; food costs and values; and how to make nutritional knowledge more effective. References for supplementary reading are given at the end of each chapter.

The Nation's [Great Britain's] larder and the housewife's part therein. A set of lectures delivered at the Royal Institution of Great Britain in April, May, and June, 1940, by J. C. Drummond and others. London, G. Bell and Sons, Ltd., 1940. 146 pp.

The subjects covered in the lectures include the medical aspects of the use of food, national food requirements, the development of the home production of food, the feeding of children, and the artificial preservation of food.

Britain's food supplies in peace and war. A survey prepared for the Fabian Society by Charles Smith. London, George Routledge & Sons, Ltd., 1940. 290 pp.

Both home-produced and imported foods are covered in this study, which deals with costs, distribution methods, production, and consumption of principal articles of food, and discusses the need for a food policy, the problem of distribution, and food problems in wartime.

Youth Problems

Paths to maturity: Findings of North Carolina youth survey, 1938–1940. By Gordon W. Lovejoy. Sponsored by Cooperative Personnel Study, University of North Carolina. Chapel Hill, 1940. xvi, 310 pp., bibliography, charts; mimeographed. (NYA and WPA official projects.)

As a result of this study the investigators made various recommendations, focused mainly upon the following major problems: (1) The age-grade distribution of youths attending school; (2) retaining youth in school until they have the training requisite for social and vocational competence; (3) vocational guidance, training, and placement; (4) working hours and wages of out-of-school youth; (5) dependent youth who are not attending school; (6) the enrichment of leisure-time activities of youth; and (7) provision of adequate medical care for all youth.

Youth, family, and education. Prepared by Joseph K. Folsom for American Youth Commission. Washington, American Council on Education, 1941. 299 pp., bibliography.

Part I, on education for family living, is written chiefly from a sociological viewpoint. In Part II the significant features of the current activities, which may be considered education for family living, and related problems are discussed. Evaluations and recommendations are presented in the final chapter.

Youth work programs—problems and policies. Prepared by Lewis L. Lorwin for American Youth Commission. Washington, American Council of Education, 1941. 195 pp.

According to the author, youth programs have been palliative, not preventive. The task ahead, he holds, is to make youth programs a part of a general scheme for the education and care of young people, on the one hand, and for a program of social-economic progress, on the other.

Youth-serving organizations—national nongovernmental associations. Prepared by M. M. Chambers for American Youth Commission. Washington, American Council on Education, 1941. 237 pp.

Job campaigns for unemployed youth. Washington, U. S. Bureau of Labor Statistics, 1940. 9 pp. (Serial No. R. 1214, reprint from November 1940 Monthly Labor Review.)

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This Issue in Brief

Wages of Common Laborers, 1940.

The average hourly entrance rate of pay of adult male common laborers in 20 industries in the United States was 50.6 cents in July 1940. This represented an increase of slightly less than 1 cent per hour as compared with the previous July. There were wide differences in the hourly rates between industries, the highest (63.6 cents) being for petroleum refining and the lowest (36.8 cents) being for the fertilizer industry. Page 1.

Wage Rates in Hawaiian Industries.

The situation of sugar workers in Hawaii at the present time compares favorably with that of agricultural workers on the mainland in respect to both rate of earnings and regularity of employment. The monthly wage rates of farm workers for the United States as a whole averaged $27.72 with board and $35.63 without board in 1938. By comparison, in March 1939, the average monthly earnings of nonsalaried male workers on Hawaiian sugar plantations amounted to $48.88. An article (p. 24) deals with the wages and working conditions of employees in the principal industries in Hawaii.

Prices and the War.

Up to the end of 1940 the level of commodity prices in the United States had not shown any very sharp advance as a result of the War and the defense program. In December 1940, the Bureau's all-commodities index, based upon the wholesale prices of nearly 900 products, was 6.8 percent higher than it was in August 1939, just before the European War started. Retail prices had risen even less and by November 15, 1940, the cost of living in American cities—including rents and services, as well as food, clothing and housefurnishings—was only 1.5 percent above its August 1939 level. Page 49.

Earnings of Federal Employees.

Men constituted 82 percent of all Government employees at the end of 1938. Of the women employed in Federal service, over half (56 percent) were doing clerical work. The level of average earnings was influenced more by the type of work done than by age of employee. Average earnings, exclusive of postmasters, ranged from $1,192 per year for unskilled trade and manual workers to $3,137 for persons in technical, scientific, and professional occupations. These facts were disclosed by a study made jointly by the Bureau of Labor Statistics and the Civil Service Commission. Page 66.

Earnings in the Jewelry Industry.

Hourly earnings of workers in the jewelry industry averaged 58 cents in February 1940, 70 cents for males and 38 cents for females. In the precious jewelry branch of the industry average earnings per hour were 94.8 cents. A marked feature of the wage structure of the industry was the concentration of earnings at exactly 30 cents in the plants making low-priced products. Page 184.

Union Scales in Bakeries.

The average hourly wage rate of union bakery workers in 62 cities was 75.3 cents on June 1, 1940. This was 2.7 percent higher than on June 1,

1939. The average maximum hours allowed at straight time were 41.3 per week, 0.5 percent less than the average for June 1, 1939. Usually overtime was required to be paid for at the rate of time and one-half. Page 194.

Union Wage Scales on Street Railways and Busses.

The average hourly wage rate of union motormen, conductors, and bus operators in 55 cities was 76.1 cents on June 1, 1940. The index of union hourly wage rates was 110.4, an advance of 1.1 percent since June 1, 1939, and 10.4 percent higher than in 1929. The basic working hours in a majority of the cities were 8 per day, with 6 days generally constituting a week's work. Page 201.

Unemployment in March 1940.

There were 52,840,000 workers in the labor force in the United States during the week of March 24–30, 1940, according to preliminary figures compiled by the Bureau of the Census, Department of Commerce. Of these workers, 45,350,000 were reported as employed on private or nonemergency Government work; 5,110,000 were reported as seeking work, without any form of public or private employment; and 2,380,000 were reported as at work on public emergency projects (WPA, NYA, or CCC). These figures are based on a preliminary tabulation of a cross section of the 1940 Population Census returns and are subject to correction when the final statistics become available. Page 102.

DEPOSITED BY THE
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MAR 25 '41

This Issue in Brief

Price Controls in First World War.

When the United States entered the World War in April 1917, prices were abnormally high because of heavy purchases made by the belligerent European countries during 1915–16. By the summer of 1917, the need for price regulation was fully recognized in this country. The President, under the authority granted him for the duration of the war emergency, established the several agencies which controlled prices both for Government and civil purchases. Chief among these were the War Industries Board and the Food and Fuel Administrations. The consumer was the primary concern of the two latter agencies while the War Industries Board was chiefly interested in prices of industrial goods for military use. Price statistics now available give proof of the stabilizing influence of these wartime controls. Page 271.

Effects of Rising Costs on Quality of Wearing Apparel.

Prices of many consumers' goods, particularly textiles and clothing, are fixed by custom at certain levels, generally known as "price lines." Adjustment to changing costs usually takes the form, initially, of altering quality in order to maintain these fixed wholesale and retail prices. On a rapidly rising market such as the present, where material costs have increased because of such factors as the diversion of looms to defense orders and the curtailment of imports, the problem of quality adjustments becomes acute. During the past 18 months the making of many different kinds of apparel sold on the American market has been modified in the effort to avoid departure from customary price lines. In many cases these changes have not been of a character to impair usefulness to any appreciable extent. In others, however, the changes have been more serious and raise the question as to whether outright increases in price may not often be preferable to great changes in quality. Page 283.

Building Houses Cooperatively.

During 1940 more than 150 single-family houses were built on the cooperative basis by six cooperative organizations of persons desiring to own their own homes. In a seventh association land had been obtained but ground had not yet been broken. A survey by the Bureau of Labor Statistics, the results of which are given in the article on page 292, indicated that these projects represent various degrees of cooperative activity. In three organizations some or all of the actual building of the houses was done by the members themselves; in the others the building was done under contract. The money cost of individual dwellings ranged from about $1,500 to as high as $6,500, but several of the associations have been making savings which will be returned as patronage refunds after all the costs have been figured. To a large degree, however, the savings have gone into extra quality in the houses.

Wartime Labor in China.

More than 3 years of warfare in China has resulted in a great shifting of Chinese labor and industry from the coastal regions to the southwestern frontiers. Rapid industrialization of this area, formerly a more or less barren wilderness, has created many new labor problems such as inadequate sanitary

and safety measures in the factories and workers' homes and the tendency for living costs to outrun wage increases. Page 322.

Labor Requirements in Aircraft Industry.

The rapid expansion of the aircraft industry in the United States, as a result of the national defense emergency, is creating a steadily increasing demand for the necessary labor. In October 1940 it was estimated that there were 203,600 workers engaged in making air frames, air engines, and propellers. By August 1941, it is estimated that, with existing national appropriations for aircraft, this number will have been increased to about 455,500 workers. Page 327.

Stabilizing the Millinery Industry.

Cooperative efforts of employers and workers to rehabilitate the millinery industry in New York City and northern New Jersey are meeting with success. The economic conditions in the industry had been singularly unfavorable for a decade and in 1936 the employers' and workers' organizations joined in creating the Millinery Stabilization Commission. Plans and practices formulated and put into effect by this commission resulted in gains in employment and earnings for employees and increased business and earnings for manufacturers in 1938 and 1939. Page 355.

Effect of Minimum Wage in New York.

The introduction of the minimum wage for women and minors in the beauty service, confectionery, and laundry industries in the State of New York has resulted in higher earnings for women in these industries. All classes of women have benefited, showing that the minimum has not become the maximum. A comparison of earnings and hours of women in these industries before the minimum wage became effective and in 1939 or 1940 is presented on page 359.

Wages and Hours of Union Motortruck Drivers and Helpers.

Average hourly rates for union truck drivers and helpers as of June 1, 1940, were 2 percent higher than comparable 1939 scales. However, this represents the smallest year-to-year increase since 1936. The actual average rates in 71 cities as of June 1, 1940, were 80.5 cents for drivers and 66.1 cents for helpers. Maximum weekly hours declined 0.9 percent from the 1939 average. The average full-time weekly hours for drivers and helpers were 47.2. Scales of drivers and helpers working on other than a straight-time basis are not included in these figures. Page 425.

Licensing of Building Contractors.

Legislation has been enacted in 16 States requiring the examination and licensing of contractors. These laws provide protection for both labor and the public by specifying qualifications as to general education, skill, and experience which a contractor or subcontractor must meet before he may receive his license to do business within the State. The majority of the laws apply to contractors in general, but several are more limited in their coverage, applying only to public-works contractors, highway or street contractors, or residential-building contractors. Practically all of the laws in this field have been enacted within the past 10 years. Page 395.

This Issue in Brief

Employment and Earnings in 1940.

Average hourly earnings rose significantly in 1940. The increase was only in minor part a result of higher rates of pay. Important factors were an increase in the amount of overtime at overtime rates and a rise in the proportion of workers in high-wage industries. Overtime, which increased notably in defense industries, contributed to higher weekly earnings. Employment, hours, pay rolls, and per capita consumption increased, but many unemployed workers remained available for employment, not only for defense production but also in consumption-goods and service industries. Page 521.

Week-end Shut-downs.

A survey of the extent of week-end shut-downs in 394 large establishments in 11 key defense industries made by the Bureau of Labor Statistics shows that almost one-half of the plants were operating at least 6 days a week (page 539). Overtime was widespread—approximately 280,000 wage earners worked more than two and one-half million hours of overtime during the midweek of December 1940. Overtime per worker for the week ranged from slightly less than 5 hours in the explosives and smelting and refining industries to more than 11 hours in the shipbuilding, firearms, and machine-tool industries. More than half of the plants were operating 5 or 5½ days per week. Although over 80 percent of the plants were making use of multiple-shift operating schedules, only 25 percent of the workers in these plants were engaged on other than the main shift.

Strike Restrictions in Agreements.

As a safeguard against stoppages of work because of industrial disputes, most collective agreements provide that disputes arising under the agreement shall be submitted to a neutral person or agency for final determination if the parties cannot reach an understanding through negotiation. The absence of such an arbitration provision usually reflects immaturity in the collective-bargaining relationship. Agreements providing for arbitration usually prohibit strikes and lock-outs while the agreement is in effect. To avoid interruptions of work after the termination date, it is commonly required that negotiations looking toward a new agreement shall be started within a specified time before the existing agreement expires. The strike-restriction provisions in a number of industries connected with national defense are described in the article on page 546.

Changes in Rents.

Residential rents have remained relatively stable since the summer of 1939 in most large cities of the United States, notwithstanding the increase in industrial activity and employment caused by preparations for national defense. The housing problem is apparently more acute, however, in some of the smaller cities where large defense orders have been placed. Data obtained by the Bureau of Labor Statistics indicate that although there was an increase of only a little more than one-half of 1 percent in 33 large cities from the summer and fall of 1939 to the fall of 1940, there were advances in rents amounting to 7.4 percent in South Bend, Ind., 3 percent in Camden, N. J., and Rock Island, Ill., and more than 2½ percent in Bridgeport, Conn., Akron, Ohio, and Chester,

Pa. Rent increases have been most numerous at the lower rent levels and have occurred most frequently when a new tenant moved into a rented dwelling. Page 577.

Consumers' Cooperatives in 1940.

An unusually successful year was experienced by the consumers' cooperative movement in 1940. Among the favorable developments noted were increased business; improvements in operating efficiency, merchandising practice, and appearance of premises; undertaking of new services or expansion of existing ones; and a notable expansion of productive facilities. The outstanding developments during 1940 are described in an article on page 638.

State Minimum-Wage Legislation.

The number of State minimum-wage laws was not increased during 1940 beyond the 26 which previously had been enacted. However, more than 100,000 women were brought under the protection of the existing State minimum-wage legislation for the first time in 1940, when nine new wage orders were issued by seven States. All of these orders apply to industries not covered by the Federal Fair Labor Standards Act. Page 684.

Earnings in Enameled-Utensil Industry.

Workers making enameled utensils had average earnings in August 1940 amounting to 52.2 cents an hour, according to a study made by the Bureau of Labor Statistics. The hourly earnings of all males averaged 57.3 cents and those of all females averaged 42.9 cents, Skilled males averaged nearly 70 cents, as compared with 58.2 for semiskilled and 49.0 for unskilled. Office clerical workers earned an average of 51.1 cents an hour—66.0 cents for males and 44.9 cents for females. Page 694.

Social Insurance in Venezuela.

Venezuela instituted a compulsory social-insurance system by a law passed in July 1940, which provides sickness and maternity insurance and insurance against industrial accidents and occupational diseases. The law applies, in general, to persons who perform services under a contract of employment or apprenticeship, but excludes, for the present, certain classes such as agricultural and domestic workers. The sickness benefits include medical and surgical care, medical requisites, and a daily cash benefit in case of incapacity for work. Insured women are entitled to maternity benefits comprising the necessary obstetrical attendance and a daily cash benefit for 6 weeks before and 6 weeks after confinement. The benefits in case of industrial accident or occupational disease include, in addition to medical and surgical care and a daily cash benefit, pensions for partial or total disability, based on the degree of disablement, and, in case of death, a pension to surviving dependents. Page 635.

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This Issue in Brief

Living Conditions of Puerto Rican Workers.

Various studies bearing upon living and health conditions of Puerto Rican workers point to widespread malnutrition and poor health among the population. The studies already made, however, have dealt with particular aspects of the problems or with limited groups of families. In order to secure a more reliable picture of the existing living conditions among the workers, a carefully planned survey has been undertaken as a WPA project sponsored by insular agencies and having the cooperation of the Bureau of Labor Statistics in the development of technical plans for the investigation. Field work started in January 1941. The survey is to cover a total of 5,000 families, representing all major lines of employment and all parts of the Island. Page 785.

Cooperatives in Latin America.

As the Latin American countries are predominantly agricultural, it is natural that farmers' cooperatives have tended to grow faster than the consumers' cooperatives. Exceptions to this are Colombia and Mexico. In Colombia consumers' cooperatives lead in number of associations but as regards business done the credit cooperatives are first. In Argentina electrical associations are well developed and, contrary to the situation in most countries of the world, are in urban instead of rural areas. In Argentina, Brazil, Chile, and Mexico, cooperatives tend to be formed in definite occupational groups (as railroad employees and soldiers), although there are also open-membership associations. Cooperatives formed by students and teachers in the schools are found in Brazil and Mexico where they are an important feature of the cooperative movement. Page 810.

Salaries and Working Conditions in Police Departments.

With 19 police-department employees for each 10,000 of population the annual per capita cost in 1938 was $4.39 in a large group of American cities. The average annual salary of the employees was $2,345. Excluding the New York City department, the number of employees is reduced to 17 for each 10,000 of population, the cost to $3.74 per capita, and the average salary to $2,181. Occupation or rank accounted for the greatest variation in salaries. For example, the commissioner heading the New York City department received $12,500 annually and cleaners in the maintenance department received $960 a year. Average annual earnings decreased directly with the size of city from $2,355 in cities of 500,000 population and over (excluding New York) to $1,907 in cities of 25,000 to 50,000. The majority of the employees worked 8 hours a day with a fraction of a day or a full day off each week. Page 817.

Hourly Earnings in the Drug Industry.

Male employees in the drug, medicine, and toilet preparations industry in May 1940 earned an average of 65.9 cents an hour, female employees, 46.3 cents, and both sexes combined, 54.6 cents. Hourly earnings were highest in the midwestern region (57.4 cents) and lowest in the southern region (44.2 cents). Page 988.

Overtime Provisions in Union Agreements.

Protection of hours standards by the requirement of a higher than regular rate of pay for overtime and holiday work has been a traditional policy with organized labor. The most common overtime rate is time and a half the regular rate. Outside of continuous process and maintenance work, time and a half rates are usually provided for Sunday and holiday work, as well as for Saturday work. Overtime and holiday wage provisions in the union agreements for the industries closely related to defense activities are not unlike those in other agreements. A detailed description of such overtime and holiday wage provisions in these defense industries appears on page 841.

Child Labor on New York Farms.

Last summer 472 children 10 years of age or under—30 of them under 5—were found working up to 10 hours a day, picking beans and berries on 100 commercial farms in Erie County, N. Y. The survey which disclosed this fact and other undesirable conditions in connection with these undertakings was made by the New York State Department of Labor. The investigation covered 3,670 workers of whom nearly three-fifths were under 18 years of age. According to one inspector, children were preferred to adults because the former were in many cases more successful pickers than the older workers, as the older folk get fatigued in the sun. Page 864.

Improved Health Conditions.

An uninterrupted series of mortality records maintained by the Metropolitan Life Insurance Co. for 30 years, covering its many millions of industrial policyholders, shows that in 1940 the death rate equaled the lowest figure ever registered for this group—7.60 per 1,000 insured lives recorded in 1939. An all-time high of almost 63 years in the average length of life, or expectation of life at birth, has now been reached. One of the most important public-health developments during the year was the sharp decline in the mortality from pneumonia which has resulted from the introduction of highly effective serums and drugs. Increases in mortality among the policyholders last year were almost entirely due to the chronic diseases of middle and later life. Page 920.

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This Issue in Brief

Defense Housing Program and Progress.

Coordination of the activities of the various governmental housing agencies and of private industry to meet defense housing problems is the function of the Division of Coordination of National Defense Housing. This Division is in the Office of Emergency Management of the Executive Office of the President. The defense housing program has four parts—registration of all vacant housing, determination of housing needs, planning and construction of the housing required, and management together with the establishment of policies respecting rentals and tenant selection. Special legislation was passed in the summer and fall of 1940 to make funds available for defense housing. The amounts and allocation of these funds and the housing policies and practices adopted are discussed on page 1061.

British Wartime Labor Control.

Wartime labor control measures in Great Britain have developed gradually since August 1939. The extension has been somewhat more rapid in recent months, although the principle of voluntary cooperation between employers and employees, which has been relied on throughout the war effort, continues to be basic in industrial relations. Use of the device of registration for essential work is being extended. With stringency in manpower looming, measures are being taken to reduce the number of workers engaged in the manufacture of consumer's goods and in the service trades; to bring citizens who are ordinarily not engaged in working for wages and salaries into war industries; and to keep persons engaged in essential work at their jobs. Page 1079.

West Coast Shipbuilding Agreement.

A master agreement involving all West Coast shipbuilding was ratified in April by both employers and employees. Provision is made for a basic hourly wage of $1.12 for skilled mechanics and an 8-hour day and 40-hour week (Monday to Friday) with time and one-half pay on Saturdays and double pay on Sundays and holidays. The agreement is for 2 years or for the emergency, whichever is longer. Strikes and lock-outs are prohibited during this period, but wage changes may be negotiated. Thus, the incentive for labor pirating has been removed. The West Coast agreement was achieved voluntarily by the labor unions, the shipbuilding employers, the United States Navy, the United States Maritime Commission, and the Office of Production Management Page 1162.

Characteristics of Skilled Labor in Shipbuilding.

More than one-third of the skilled workers recently employed by a number of the shipbuilders on the Atlantic Coast were recruited from manufacturing industries and nearly one-fifth were obtained from the ranks of the unemployed. The workers came from 43 States, Venezuela, Honduras, and the Canal Zone. Over three-fourths, however, were from the 6 Atlantic Coast States wherein the shipyards studied are located. One-fourth of the total number were 45 years and over and 46 percent of all new workers were under 36 years of age, the upper

limit covered by the Selective Service Act. Page 1142.

Man-Hour Employment in Defense Industries.

Seventeen defense industries were averaging enough overtime in January 1941 to be equivalent to the addition of 6.6 percent to the working force. Striking increases in employment occurred during the past year in many defense industries and many plants adopted two- and three-shift operation. In these industries man-hours rose by 37 percent and employment by 28 percent. Over the year, total man-hours increased by more than 100 percent in aircraft, ammunition, and firearms manufacture. Page 1180.

New Agreements in the Dress Industry.

The new agreements in the New York dress industry contain a number of unique features. Among them is the provision that detailed rules and regulations designed to improve management efficiency are to be worked out under the agreement in order to effectuate the policy that each association member "shall operate his shop at all times in an efficient and well-ordered manner." Under the impartial chairman a special department is established to advise employers on how to attain the efficiency standards set forth in the agreement. Page 1164.

Seniority Provisions in Union Agreements.

The principal aim of a seniority program is to afford the maximum security and reward to those who have rendered longest service with the employer. Seniority also tends to eliminate favoritism and discrimination in various phases of the employment relation. The application of seniority raises difficult questions for both the employer and the union, such as the area within which seniority rights are to be established; the results of displacing junior employees who are both competent on the job and loyal union members; and the degree to which competence and ability should be considered along with seniority. Page 1167

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This Issue in Brief

Hours and Efficiency in British Industry.

Current increases in daily and weekly working hours under the defense program focus attention on British experiences during the last and present wars. Although this experience does not enable us to set an absolute level of hours that may be worked safely, it indicates the consequences from excessive lengthening of working hours. Except for short periods, a considerable extension of the usual hours of work does not result in a sustained proportionate increase in output. The high production level which follows the introduction of overtime soon gives way to a pace which the worker feels he can safely maintain over a longer period. Rest periods keep production at higher levels, short multiple shifts are better than long shifts, and 1 day's rest in 7 is essential. Page 1337.

Interstate Migration of Workers.

Interstate migration of United States citizens is a domestic problem of such importance that it requires immediate attention and cannot be postponed for the duration of the national defense emergency, according to the final report of the Select Committee of the House of Representatives appointed to investigate the subject. In order to meet the problems created by present migrants and the new migrant army which will be released when the defense emergency is over, the committee recommends legislation to regulate the activities of interstate labor contractors, the extension of camps for agricultural migrants and of the activities of the Farm Security Administration for low-income farm families, and development of opportunities for migrant families to return to independent farming. Page 1347.

Union-Management Cooperation.

The term "union-management cooperation" usually refers to programs of joint participation of labor and management to improve the economic condition of a company or an industry, thereby bringing benefits to both employers and workers. The object may be to eliminate waste, to improve the quality of production, to increase output, or to modernize equipment. Such cooperation is in an experimental stage in American industry, with a few outstanding successes as well as failures. Some examples of union-management cooperation are given on page 1351.

Types of Work of Federal Personnel.

Federal personnel, other than defense, increased by 4 percent and pay rolls by 5 percent from December 1939 to December 1940. Of the 15 groups of Federal employees outside of national defense, general information and research services showed the greatest rise in number of employees—145 percent—incident to the taking of the decennial census. Personnel was reduced in public works, Indian services, agriculture, welfare, industrial and commercial development, and conservation. Monthly pay rolls also declined in all of these branches except agriculture and welfare, which showed slight increases. Civilian employment in national defense activities rose 86 percent and pay rolls 95 percent, over the year. Page 1360.

Shift Operations in the Machine-Tool Industry.

Two- and three-shift operation prevailed in machine-tool plants during March 1941. Practically all workers were putting in 8 to 20 hours of overtime weekly, the average being 12.5 hours. Comparatively few establishments were using a full complement of men on either the second or third shift. The 7 plants operating on a single-shift basis employed about 3 percent of the wage earners; the 57 plants operating 2 shifts had 52 percent; and the remaining 26 plants operating 3 shifts represented 45 percent of the total. Second- and third-shift work in many plants was limited to operations in "bottleneck" departments and to maintenance and repair work. Page 1380.

Compulsory Civil-Defense Work in Great Britain.

Compulsory recruitment for civil-defense work is authorized by the British National Service Act of 1941. It provides for calling on men of military age and conditionally registered conscientious objectors to perform civil-defense work on broadly the same lines as for the armed forces. Conscription for civil defense became necessary owing to the shortage of full-time workers in certain districts and because the part-time citizen force, though valuable, was insufficient to meet the requirements. It is proposed to draw on older men of military age for compulsory civil defense rather than to draft younger men. Members of the civil-defense force are now in the service of the Crown instead of the local authority, as was formerly customary. Persons accepted for duty are required to continue civil-defense service until the end of the present emergency. Page 1393.

Voluntary Sickness and Disability Insurance.

Voluntary measures for providing protection against the economic hazards of sickness and disability are described in a recent report of the Social Security Board. Sickness insurance is provided by commercial companies and in the form of cooperative insurance developed by fraternal societies, employee-mutual benefit associations, and trade-union benefit associations. There is no adequate information as to the number of persons in the United States who are insured against sickness on a voluntary basis, but it is said that it is safe to say that only a small fraction of the public is adequately protected and even for those persons holding some type of disability insurance, the protection is fragmentary and inadequate. Page 1414.

Earnings in the Seamless-Hosiery Industry.

Hourly earnings of workers in seamless-hosiery mills averaged 41.2 cents in September 1940—an increase of approximately 17 percent over the average of 35.1 cents for September 1938, just previous to the application of the first minimum wage order under the wage and hour law. Over three-fourths of the workers were earning 32.5 to 47.5 cents an hour in 1940, when the Bureau of Labor Statistics made its survey, and almost half earned between 32.5 and 37.5 cents hourly. One-fifth earned exactly 32.5 cents, the minimum hourly rate of pay established for this branch of industry by wage order. Page 1514.

NEW PUBLICATIONS

UNITED STATES DEPARTMENT OF LABOR

Bureau of Labor Statistics

Employment and earnings in the engineering profession, 1929 to 1934. Bulletin No. 682.

A selected list of the publications of the Bureau of Labor Statistics: 1940 edition. Bulletin No. 683.

Labor in the Territory of Hawaii, 1939. Bulletin No. 687.

Salaries and hours of labor in municipal fire departments. Bulletin No. 684. Volume IV—West North Central cities; Volume VI—East South Central cities; Volume VII—West South Central cities; Volume IX—Pacific cities.

Salaries and hours of labor in municipal police departments, July 1, 1938. Bulletin No. 685. Volume I—New England cities; Volume II—Middle Atlantic cities; Volume VI—East South Central cities (in press).

Money disbursements of wage earners and clerical workers in 12 cities of the South, 1934–36. Bulletin No. 640.

Study of consumer purchases—

Family income and expenditure in New York City, 1935–36. Bulletin No. 643. Volume I—Family income.

Family income and expenditures in nine cities of the East Central region, 1935–36. Bulletin No. 644. Volume II—Family expenditure.

Family expenditure in selected cities, 1935–36. BulletinNo. 648. Volume I—Housing (in press); Volume VII—Miscellaneous expenditures.

Children's Bureau

Problems and procedures in adoption. Publication No. 262.

Maternity care at public expense in 6 counties in New York State. Publication No. 267.

Care of children coming to the United States for safety under the Attorney General's order of July 13, 1940. Publication No. 268.

Division of Labor Standards

Visual information on problems of the wage earner. (A guide to exhibits etc., and charts available from the U. S. Department of Labor.)

Protecting plant manpower: Practical points on industrial sanitation and hygiene. Special bulletin No. 3.

Wage and Hour Division

Annual report, for the fiscal year ended June 30, 1940.

Women's Bureau

Lifting heavy weights in defense industries: Methods for conserving health of women workers. Special bulletin No. 2.

State minimum-wage laws and orders, 1940. Second supplement to Bulletin No. 167.